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LEADING ARTICLES

DIET IN GASTRIC DISORDERS.*

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WE may state without much fear of successful contradiction that the success of any physician can be measured practically by the attention he has given to the regulation of the diet and the hygiene of his patients. Therefore, from a practical standpoint, the diet has demanded a large part of every physician's attention; nevertheless, from a theoretical and scientific standpoint, the regulation of the diet is most unsatisfactory, simply because it has not yet been reduced to scientific principles.

It may be interesting to note that the natives of India away back in the times represented by the Vedas paid great attention to diet and hygiene. They demanded, for instance, that their patients eat twice a day—in the forenoon between nine and twelve, and in the evening between seven and ten; but, no one should eat in public. They advised the use of gold dishes because gold is an excellent tonic for the eye; those suffering from liver troubles should use silver dishes, because of the good influence of silver upon the liver; zinc dishes were of special value in increasing the intelligence and the appetite; pewter increased the temperature and the passions, but was good for driving out worms and for disorders of the mucus membrane. They advised the use of steel and glass dishes for chlorosis, jaundice

DR. GEORGE HOWARD HOXIE

and swollen glands. Stone and earthenware brought poverty. Wooden vessels increased the appetite, but also increased the secretion of mucus. Dishes made out of leaves were good as a prophylaxis against poison. Before going into the dining-room, they were taught to take some salt or ginger in order to increase the appetite and at the same time cleanse the throat. Caraka rules that the patient should eat with the face toward the north; on the other hand, Manu directed his disciples to eat with the face toward the east; and, more especially, if one desired to become famous, he should eat with his face toward the south; to become rich, toward the west; and, to have a clear understanding of anything, toward the north. According to the Indian teaching, there are four kinds of food—those that are to be chewed

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by the teeth, like bread; those that are handled by the tongue, as vegetables; those that are sucked in through the lips, as mangoes; and, fourth, the fluids. They prescribed that pomegranates, sugar, and similar things should be eaten always at the beginning, never at the end of a meal. They advised also the eating of the hard and fatty substances at the beginning, tender meat at the middle, and fluids at the end of the meal. Another regulation demanded that sweets should be taken first; then salt and sour things; and, third, the sharp and bitter food; and, finally, the astringents; and, one should end the meal with a drink of milk or whey mixed with water. As to quantities, they directed that half the stomach be filled with solid substance; a quarter with fluid and that the rest be left empty. Only occasionally at meal time should water be taken. If taken at the beginning of a meal, it makes the eater thin; if taken at the end of a meal, it produces obesity. A thirsty man should quench his thirst before beginning to eat and a hungry man should take some solid food before drinking. The results of not obeying this rule are that the former become afflicted with tumors and the latter with dropsy. Man is what he eats; i.e., his intelligence and character depend upon his food. After finishing his meal, one should carefully wash his mouth both within and without, then, his hands, with water.

The Greeks also paid great attention to diet and hygiene as we know. Thus, Hippocrates devotes one volume to a treatise on the various foods and their uses.

Among the Latins, Celsius seems to have devoted the most attention to the diet and the hygiene. He prescribes, for instance, that each individual should seek to know his own weak point (locus minoris resistentiae), and should accordingly develop that weak part of his body by frequent rest alternated with frequent exercise. Sweet and fat foods and drinks are particularly noted by him for use in this connection. Those who desire to become thin should bathe, fasting, in warm salt water; then, lie in the hot sunshine. They must spend considerable time in sleep; but, above all, must use to the limit of their strength very active exercise. Celsius advised those who had weak stomachs to take frequently a drink of cold water; also, to gargle with cold water; and, always to rest after eating. He warned against gluttony and overloading the stomach and advised patients to begin each meal with salads and vegetables and then take the meats. Compotes are to be avoided because they produce an increased secretion of the gastric acids. In appropriate cases, however, dates and apples and similar things might be allowed.

Coming down to modern times, it is interesting to note that Boerhaave (1668-1738), who was the most celebrated physician of his time in Europe, gave great attention to diet.

Boerhaave treated a very well-to-do class of people and it is noticeable that he advocated the use of wines and outlined definite indications for the use of each sort. He paid special attention to chlorosis, believing that it was caused by the fluids of the body overbalancing the solids.

Still later (in the last part of the XIX century) Kussmaul of Heidelberg went into the subject of the treatment of gastric disorders very thoroughly, and it was he who introduced the use of the stomach tube and the study of the gastric contents. In dilation of the stomach, Kussmaul prescribed very small meals at frequent intervals; and, ordered that an abdominal bandage be used to support the sunken organ. Kussmaul then deserves the credit of using exact diagnostic means to ascertain the condition of the stomach interior. The treatment of ulcus ventriculi was, however, first demonstrated by John Peter Frank. He prescribed absolute rest with the application of snow or broken ice to the abdomen and the use of minute quantities of milk or beef tea. But, Cruveilhier was the first to work out the pathology of the ulcus ventriculi. He used a systematic milk diet, used no medicines, and depended chiefly upon rest (Le repos pour l'estomac c'est la diète).

William Brinton, at the end of the 50's, gathered together and presented a series of lectures on the physiology of digestion at St. Thomas Hospital, London and announced his conclusion that the diet influences the character and the amount of the gastric secretions.

We date the use of subnitrate of bismuth to Trousseau (of Paris). This appeared at the end of the 60's; about the same time with Kussmaul's announcement of the use of the stomach tube.

It was Billroth (of Zurich and later of Vienna) who first began surgical operations upon the stomach. He did this at the suggestion of his friend Kussmaul. Kussmaul also advised operating in case the gastric ulcer perforated; but the first operation of this sort was done by Rydygier in 1881.

In spite of the advance of knowledge of the digestive processes in the stomach, we still find physicians using directly opposite methods when it comes to diet. Thus, I know one physician whose one article of faith is to avoid fermentation by forbidding bread and

potato. I know another who prescribes protein substances for gastric ulcer and similar erosions. Therefore, I believe it is worth our while to review briefly the physiology of gastric digestion.

The carbohydrates are split up partly by the ptyalin of the swallowed saliva, partly by the acid and the bacteria of the stomach contents. Starch paste is changed by the acid of the stomach into a soluble starch and from this by the help of acid fermentation under the influence of bacteria, dextrin, sugar and lactic acid are formed. Emulsified fat is split up to a considerable extent by the stomach steapsin. Casein is coagulated under the influence of the rennin and the curd thus formed is dissolved again by the gastric juices. The pepsin-hydrochloric acid dissolves all kinds of true proteids, the gelatine forming substances and elastic tissues; but, keratin is not acted upon. The function of the stomach is then to transform the undigested food into a soupy mass, or chyme.

It has been found whenever the stomach contents were removed during the process of digestion, that they consisted in by far the greatest part (86 to 98% of the total nitrogen of albumoses). This, however, has been shown to be due not to the fact that the gastric juices cannot carry the digestion beyond the albumose stage but because the most complete forms have been absorbed and lack of time has prevented the more complete digestion of the rest. So, when a living stomach was removed entire and kept in a moist warm chamber for four hours, 50% and over of the nitrogen of its contents was in the form of peptones and end product.

Since the food always remains for a tolerably long time in the stomach, this organ must suffer most of the harmful effects of an ill-adapted diet. We speak also of a digestible or indigestible article of food according as it is digested with a greater or less ease in the stomach. It would be very important, therefore, if general rules could be established as to what is digestible and what is not. Unfortunately, however, this could be done only to a very limited extent; for the stomach is very capricious and what is well suited to one stomach is unsuited to another. The following general principles may nevertheless be laid down (Tigerstedt): First, a too voluminous meal is harmful; second, poorly masticated or very compact food is harmful to the stomach; third, tough animal foods, such as meat from old or poorly nourished animals are difficult to chew and offer great resistance to the action of the stomach; fourth, fat in the foods has a slightly inhibitory action upon the glands of the stomach, and if intimately mixed with the particles of food, it coats them and prevents the action upon them of the gastric juices; fifth, strong spices, alcohol, etc., are unfavorable to stomach digestion; sixth, digestion is influenced by several factors outside of the stomach itself; nervous exhaustion or excitement reduces the strength of the gastric juice; intense sweating reduces the quantity —even heavy muscular exercise reduces gastric digestion. The office of the stomach is then that of reducing the food to a soupy mass. It could be dispensed with; but, in that case, the food would have to be given at shorter intervals, in smaller quantities and in a fluid form. In other words, the stomach is a protecting organ for the intestines; and permits us to derive our sustenance from a greater variety of foods.

Hutchinson, in his "Food and Diet" maintains that the essential role of the stomach is mechanical rather than purely digestive; and, that therefore, the physical form of the food is of greater importance than its chemical compostiion. He lays down as the first rule of diet that the food must be presented to the sick stomach in a fine state of division, and even then should be carefully chewed. His second rule is that the bulk should never be great. Therefore, in dyspepsia, meals should be given at frequent intervals and of small size. He believes that fat is apt to give offense—particularly cooked fat because of the irritating substances liberated in the cooking.

On the other hand, Williams in his "Food in Disease" states: "A common error in feeding in disease of the digestive tract is the omission of fat from the diet. Good butter is readily digested and is a concentrated food which supplies calories of heat generously and the occasions for withholding fat in this form are very rare in digestive diseases."

The diet in the organic diseases of the stomach can be pretty definitely described. The following are some of the generally accepted principles: Acute gastritis demands first of all that the stomach be granted rest; therefore, the patient should rest not only his stomach, but also, his entire body and should not take any food of any kind except possibly water (and that, in severe cases, should be supplied per rectum) until the inflammation passes away and the inclination to vomit is not so powerful. Probably the first food that can be administered is milk and this should be diluted either with lime water or barley water to prevent the formation of large curds. Eggs may be given only when raw. Whey may be used instead of milk. Alcohol solutions of peptones should be avoided because of the irritating and stimulating influence of the alcohol. The

quantity given at first should not be more than two tablespoonsfuls of diluted milk. Following milk, the physician might introduce rice, squabs, scraped beef, and similar articles; but, only in small quantities and without stimulation.

Chronic gastritis is more difficult to treat. Here, you have either a hyper-secretion of mucus which covers over the food particles, or else you have an atrophy of the glands resulting in the secretion of the little of the gastric juice. In either case, the result is a delay of the digestion with resultant fermentation, eructation, regurgitation of the acids; and, other signs of "heart burn." Here, the general rules are: The patient should never eat when he is tired; he should never eat large quantities; and, he should eat regularly. The food should be non-irritating and prepared for the intestines as nearly as possible; therefore, peptones, milks, and similar predigested foods are first to be thought of. If the patient is in position to permit frequent gastric lavage; then, more concentrated foods may be used, such as fresh meat, eggs albumen and scraped beef. Where lavage by the stomach tube is not possible, it will be practically necessary to see a similar effect by the use of alkaline mineral waters taken when the stomach is empty or just before meals. Sometimes a glass of hot alkaline water, such as Vichy taken just before the food will so loosen the mucus lying against the stomach wall as to make it possible for the stomach to digest the food then put in.

Hyperchlorhydria is a condition about which here seems to be varied opinions; but, inasmuch as it is a common condition in these days of excessive nervous strain, we need to pay some attention to it. The principle of treatment must, however, be the same, i.e., the diet must be non-irritating in order not to stir up gastric secretion. For this reason, the food should be in a soupy mass ready to be introduced into the intestine. It should not be highly spiced or stimulating; nor, should it be either very hot or very cold. Thus, therefore, I am not in favor, in this disease, of giving ice cream as many men do; nor, am I in favor of using an immense amount of soda to neutralize the acid. It seems to me far wiser to seek a diminution of the production of the acid. Here the fats have a mission to perform in that they ordinarily decrease the secretion of the gastric juices; and, if used judiciously, may enable the patient to take with considerable comfort, various forms of food. We must, however, sharply distinguish hyperchlorhydria and the actual erosion or ulcer. I have noted that olive oil used in a case where some slight hemorrhage had been detected produced great distress, which lasted for twenty-four hours, or more. Since the production of the gastric juices is sometimes due to the smell or taste of food, it is frequently advisable to pass the food into the stomach by means of the tube. We should avoid, here, as in chronic gastritis, fried foods, meats that have been cooked more than once, coarse vegetables, sweets, pastries, cakes, ordinary puddings, acids, spices, condiments, alcohol, the ordinarily hard cooked eggs, shell-fish, and anything that may disagree with the individual.

Dilation of the stomach is really due to the loss of mechanical power; and, the danger is that food may rest for too long a time in the stomach and there ferment, producing not only abnormal products but the distress due to the distention of the viscus. Of course, the first effort of the physician must be to tone up the gastric muscle by means of lavage, massage, vibration, etc., but, the first principle of diet in this condition seems to be the use of non-irritating and non-fermentable foods. The general principle which we have been hitherto considering of using small meals frequently repeated, in gastric disorders, does not apply to dilation of the stomach. Here we have a weakness not of the secretory apparatus but of the musculature. Frequent meals would put an additional task upon this musculature. Therefore, we must use few meals and prepare these meals in such a form that they will pass from the stomach with the least possible delay. Inasmuch as gastroptosis is usually connected with this disorder, it will be of great help if the patients are required to lie on their right sides while the food is being digested. It may even be necessary to do rectal feeding in order to rest the stomach entirely; but, at any rate, the use of the stomach tube is almost essential, epecially, in those cases where there is a stenosis of the pylorus or some other mechanical hindrance to the emptying of the stomach.

It seems strange that after all these years some physicians will still attempt to give food by way of the mouth in ulcer of the stomach even where there is hemorrhage present; for, it is very seldom that oral feeding should be permitted in cases of ulcer, even when there is no hemorrhage. The length of time for which this rectal feeding should be kept up will be different for each case. In any case, however, where oral feeding is attempted, great caution must be observed to put the food in such condition as not to be injured by the hyperacidity. Thus, if peptonized milk be chosen, for the first food to be given by the mouth, it should be well diluted with lime water and given, of course, in small quantities until the tolera-

tion of the stomach be established. If there should prove to be considerable secretion of mucus, hot water should be acceptable to the patient. If, on the other hand, there is general erosion, then no water at all would prove much better.

Successful feeding, in cases of cancer of the stomach demands complete control of the serving of the food. If there is obstruction, then the food must be given as indicated for dilation of the stomach with the added note that nothing should be given which would depend on the presence of acid for its digestion. If there is no obstruction present, then small meals of highly nutritious substances in finely divided form should be chosen; thus, eggs, raw, or just warmed; milk; fluid beef (not beef tea); and nuts thoroughly ground would all be helpful In general, in such cases, we have to depend on pancreatic digestion.

Where there is a lack of acid without the cancer, we have to follow the same general rules. In these cases, a meat diet will prove far more acceptable than vegetables.

However, it is not with cases of organic diseases of the stomach that the physician finds his greatest difficulty; but, rather with those disorders due to general exhaustion wherein the innervation of the stomach becomes so weakened that it is now the musculature which does not do its work and now the glands. We find cases in both sexes and all classes of society. In some patients, the condition is due to acute overstrain; in others, it is due to a long continuance of a trying course of life. In any case, the condition of the stomach is due to a functional disorder rather than an organic one. Possibly, for the sake of clearness in our discussion, it would be well to classify these, as, first, those due to a local exhaustion from overfeeding or the use of gastric stimulants (e.g., condiments and alcoholic drinks); second, those due to muscular exhaustion, such as the overwork of a farmer during harvest, or, of a bookkeeper working at night as well as in the day; and, third, those due to a strictly nervous strain such as that of the society woman, or as the speculator who has immense sums of money at stake, or the lawyer with some important case which has used up all his vital energies. The first indication for treatment in all these cases, due to whatever cause, is complete bodily and mental rest. The first group of cases differs from the others in that it would probably show some local catarrh or mucous secretion which would interfere somewhat with digestion. In the other cases, a troublesome mucus discharge is usually absent. Therefore, in the first class, in connection with any diet pointing toward giving rest to the stomach, it is well to use the cleansing effects of water, either distilled or an alkaline mineral water taken, not in connection with food, but when the stomach is empty; for instance, half an hour before meals. This may be helpful in the second and third cases, but is not regularly so. It does not appear to me that the exact proportion of the mineral salts in such a drinking water is of very much consequence, provided the water is not too strongly irritant or cathartic. For this reason, the Vichy water has won wide repute; but any water not too strong and that is agreeable to the patient so that goodly quantities may be taken, is useful. Here the general principle of small meals frequently repeated is better adapted than the one used in connection with dilation of the stomach. Probably for all these cases the treatment given at the Battle Creek Sanitarium is the best adapted. There, the patients are given very coarse dry food (the fact that it is mainly vegetable, insures the patient's taking a considerable amount) which compels the patient to sit for a long time at table and masticate it thoroughly. This simple fact probably is the secret of much of their success. No water or other drink is allowed with the meal or within one hour after it. Their rule requiring the patient to sit for one hour at the table is a very good one; and, if they would omit their dogmatic discussion of the value of meats and their religious moralization, their line of treatment would be one which every general practitioner could study with much benefit. The basis of their meals is granose biscuit which might be defined as a dry breakfast food compressed into cakes. This has an agreeable flavor, but is so absolutely dry that the patient must take it in small mouthfuls and chew it long and well. Now, if the dining-room be pleasant and the company agreeable, such a diet is very well adapted for its purpose. The real nutrition of their diet is to be found in the milk, eggs, and nuts; nevertheless, the patients at this sanitarium do not gain in muscular strength, as a general rule, under this regime.

Whatever regime may be chosen, it is well for every general practitioner to have ready at his disposal a few dietaries which every household could follow out. That is, he should be ready to prescribe diets utilizing foods from each of the three classes: proteids carbohydrates and fats. These should provide when combined into a dietary, the requisite 2800 calories and 112 grams of nourishment daily, so that his patients may not fall away under their use. Then, he should insist upon the strict adherence to these foods.

The food dishes may not be elaborate nor great in number. The directions for preparing these few dishes, however, should be given with a great particularity. First, with regard to bread (the carbohydrates). In practically all gastric disorders, this should be toasted, or, as our Battle Creek friends would say, dextrinized. This is best accomplished by securing a good firm bread (such as is to be obtained from a good baker), cutting it into rather thin slices, and putting it into a slow oven until it is completely dried through. Then, it should be put on the top of a stove or in a toaster and its surface brought to a crisp brown. This toast will not have any yeast about it to cause fermentation, the soda and the alcohol will have been completely expelled, the glucoses will have been partly changed to the dextroses, and the whole will be in such consistence as to demand thorough insalivation before being swallowed.

For proteid, I think that the general practitioner can best confine himself to steaks and roast beef. This should be tender to begin with, and if there is unsurmountable objection on the part of the household to broiling the steaks, then the roast beef should be chosen and only the inner cuts permitted the patient; but, where broiling can be done, then slightly underdone broiled steak will be very easily digested by these patients provided we can compel them to sit long at the table and chew thoroughly the food. I have found that such steak may be given to typhoid patients in the last week of their disease, provided we ask them to chew thoroughly the food and then to spit out the substance. This gives them all the pleasure of eating the steak and avoids the danger of irritation from the fiber. The same principle might possibly be applied to some gastric disorders where it is undesirable to have the meat fibre in the stomach.

With regard to milk which combines all the elements of nutrition, I find it very advantageous to know how to give minute directions for peptonizing it; and, for diluting it with lime water. (Both Fairchild's and Wyeth's peptonizing tubes made up of pancreatin and soda have been serviceable in my practice).

Eggs, of course, go with milk to supply both proteids and fats, and should be presented raw or very slightly cooked. Raw eggs are perhaps best given in an egg lemonade or in an egg-nog made up of cream, eggs, a little sugar and some simple flavor. I believe that the addition of whiskey to such a preparation is harmful rather than helpful; because, it violates the principle of granting rest to the stomach. The slightly cooked eggs will prove uniformly better if eaten soft boiled or baked.

Regarding the fruit juices, I find that my patients show much idiosyncrasy. As a general thing, I try grape juice first and always look for a juice prepared by simple sterilization without the addition of antiseptics. Lemon juice and orange juice added to an egg-nog (instead of whiskey) have proven very satisfactory. As soon as possible, I like to have my patients use rather freely apple sauce. Its acid is agreeable to the weakened stomach; it has a slightly laxative action; and, in general, seems to tend toward the well being of the patient.

I have not had great success in the use of nuts; least of all, with the preparation of nuts sent out by the Battle Creek Sanitarium people. I find that if we give patients nuts, cracked, but not separated from the shells, to pick out and chew at the close of their meals that then they seem to show greater satisfaction, than if I ask the cook to incorporate the various nuts into cakes and pastries. However, I have not found any particular variety of nut a specific for any paricular condition—as was claimed for pecans in an article two years ago, that they were a specific for indigestion attended with bloating.

My experience goes to substantiate the findings of physicians generally that a great deal may be accomplished by having patients suffering from gastric exhaustion rest for one-half hour to an hour after each meal; especially, if such rest be taken in the open air and sunlight. A further help in this connection is the use of baths. For instance, the electric tub bath with a sinusoidal current given when the stomach is empty will stimulate the stomach into taking much more easily the food that is given it. Cold douches applied to the spine early in the day and deep massage of the abdomen late in the afternoon are also procedures that have proven very helpful to me.

DISCUSSION.

Dr. R. T. Sloan, Kansas City, Mo.—I have no fault to find with the paper, but would make this suggestion, however, the diet is not the question in hyperchlorhydria, and in that I would give freely of the proteids. In the treatment of chronic gastritis we gladly systematically encourage the secretion of hydrochloric acid by increasing the need of it. If I were asked what class of cases gave the most trouble, I should say that was the class of neurotics. It is not a matter of diet at all so far as the stomach is concerned. With the exception of ulcer and cancer there is not much need of diet. I will

except also those cases where there is a hypersecretion of hyperchloride. In chronic gastritis you have an excess of mucous and the main thing is to get the stomach cleaned out and by applications of hot water tone up the mucous membrane. We should regard the stomach as a reservoir rather than a digestive organ. I think the administration of citrate of potassium is advisable in fifteen grain doses every three hours. I cannot state how it acts, but it has effect on the motor mechanism of the stomach.

Dr. J. D. Kernodle, Coyle, Okla.—I think the matter of diet is one of the greatest things to be considered. I think it is the cause of all our diseases, not excepting tuberculosis —that it is the predisposing cause of tuberculosis—rheumatism. We know there are three great things necessary for us to live, we must ingest, digest, egest. And when any one of the three are interfered with seriously we will die. It is estimated that a man eats during his lifetime three carloads more than is necessary. Then from an economical standpoint diet is a good thing. It is not only a question of what a man shall eat, but how shall he masticate it. I enjoyed the paper very much. I don't see how I could get along without that paper—the doctrine it inculcates. Whenever you begin to use hydrotherapy to get the bowels to move you might as well quit. Only under extraordinary circumstances would I advise citrate of potassium. I knew a Catholic priest; if ever there was a christian he was one. He gave not only his fortune but the energies of his life to uplift and educate and help the people. He had a severe case of chronic gastritis and washed his stomach out twice a day. .He was benefited but deceived. When you are curing people you may be killing them. He is now in Europe; before leaving New York he offered $1,000 to any one who could help him. So when we offer help we may lull ourselves and our patients into a feeling of security, even while they are slipping away to the river of death. We should always try to build up the system while we give functional remedies, then we can benefit out patients permanently.

Dr. Hoxie in closing.—In hyperchlorhydria I believe it is bad policy to give the proteids for they increase the flow of acids. It is like giving morphine to a morphinist in an asylum.

THE origin of the phrase, "Mind your P's and Q's," is said to have been a call of attention in the old English alehouses to the pints and quarts being scored down to the unconscious or reckless beer drinkers.

TREATMENT OF CONJUNCTIVITIS TRACHOMATOSA RELATIVE TO SEQUELAE.

FREDERICK P. PARKER, M. D.

ST. LOUIS.

I KNOW of no disease which is more trying to both patient and physician, nor of any that holds more alluring inducements to the charlatan and quack, than chronic granular conjunctivitis. Consequently, in combating so dreaded a malady as this we should gather together the best and most efficient means of treatment that experience and observation have laid at our command.

In presenting to your mind a subject of such vast importance as the treatment of trachoma, I do not expect to Oslerize, neither do I expect to revolutionize, but merely to subtract the good from the bad as I have found in adopting the various courses of treatment offered by different authorities, thereby obviating and preventing as much as possible the sequela which are more or less liable to follow. Fuchs says it is only the lightest cases, or those that come under observation early, that are ever cured without serious and lasting impairment to some part of the eye. However, be that as it may, the object of my paper is to outline treatment which purposes preventing and having as few of such results as possible.

I wish to preface my remarks with the assertion that if there was more operating combined with local applications in the treatment of trachoma we would shorten the duration and at the same time lessen the hypertrophy of the conjunctiva, thereby lessening the danger of later complications. I believe that if it were possible to make each and every case a hospital case, we would have less trouble in effecting results and would, consequently, have fewer complications follow. It is almost impossible to have the proper hygenic precautions used at home that should be. Unfortunately the great majority of cases occur among the poorer classes, who live in close, dirty and ill-ventilated rooms, where we find two, three or more in one bed. In most dispensary cases conformity with strict sanitary regulations are impossible. For that reason, where possible, I always have the patient come to the hospital, and where there is not too much edema and inflammation operate immediately. Should there be much inflammation, ice cold compresses are applied to the lids for twenty or thirty minutes at a time every three hours for three or four days. Then under an anesthetic (general if a child, local if an adult) evert the lid and with a curette go carefully over each and every part of the granulation until the

conjunctivae is perfectly smooth, avoiding cutting as much as possible, leaving as much of the conjunctivae intact as can be consistently and at the same time remove the granules. Again, have ice compresses applied every three hours and a 5 or 10 per cent solution of argyrol instilled into each eye three times a day until the inflammation has subsided enough to see if the granules have been thoroughly removed. If some remain, go through the same procedure again. Rarely, if ever, will you have to do the curettement more than twice in any one case before you will have a perfectly smooth conjunctiva. Continue to have patient use ice cold compresses every two or three hours for three or four days until you find the secretions and inflammation greatly diminished, before beginning to make applications directly to the palpebral conjunctiva. At this stage probably the best medicament to be used is a solution of equal parts ichthyol, glycerine and water. This is best applied in the following manner with an applicator, the end of which has been protected by a pledget of cotton so as not to bruise or scratch the conjunctiva. Evert the upper lid and by firm pressure with the applicator, which has been dipped in the above solution, upon the conjunctiva tarsi press or massage the Meibomian glands upward and always to the lid margin. By this procedure you empty the glands of all secretions and leave as near as possible a perfectly smooth conjuctiva, and at the same time further the disappearance of the conjunctival hypertrophy. After the inflammation has subsided, and we have a perfectly smooth glistening conjunctiva and the cornea is free from ulcers, and we still have hypertrophy, a solution of copper sulphate, 10 grs. to the ounce, is applied to the everted lid once a day, and allowed to remain for from one-half to one minute, and then washed away with a 1-500% alphozone solution. In this way the process of shrinking in the conjunctiva will be restricted as much, if not more than by any known method of treatment I have ever followed, consequently averting to a greater degree the cicatrical contraction, which is more or less liable to follow.

In using the curette for the cure of trachoma there is a two-fold advantage obtained. First, we avoid bruising, mangling and distorting the tissues as we do with the Knapp roller forcep, and second, we produce a pathologic non-destructive secondary inflammation quite different from that produced by DeWecker, which, to my mind, has caused more bad results in the hands of the average oculist than any other known method of treatment.

In concluding, I again make the assertion that by early operating we shorten the duration of the disease, and at the same time lessen hypertrophy of the conjunctiva, causing us less fear of future sqeuelae.

1423 Euclid Avenue.

SPINAL IRRITATION.

W. T. MARRS, M. D.

PEORIA HEIGHTS, ILL.

THIS is a functional disturbance whose symptoms may be multiform in character. It occurs in middle life and is much more frequent in women, although the male sex is by no means exempt from it. Hereditary tendency to neurotic disorder can be traced in the majority of cases.

Among the exciting causes may be mentioned fatigue and overwork, improper and insufficient food, prolonged lactation, excessive sexual intercourse, and anything that lowers vitality. Patients complain of tenderness and pain in the spine. If the seat of trouble is in the cervical spine it may be attended by congestion of the pharynx; if in the dorsal region, there is likely to be gastric disturbances; while the lumbar and sacral regions when involved may cause an abnormal condition of the intestinal and genito-urinary tracts. Pressure over one or more vertebrae may elicit pain; sometimes this tenderness is diffused along the whole spine. Many women during menstruation suffer intense lumbar pains. If this irritation should extend higher the breasts may become sensitive or even painful. Intercostal neuralgia is also of frequent occurrence, and the patient is prone to think it pleurisy or an affection of the lungs. If the nerves at the terminus of the spine are the seat of functional disturbance the result is a coccyodynia, a very painful affection.

The patient usually suffers great lassitude after exertion; this may be so extreme in some cases as to simulate a paresis. The heart is as a rule lacking in tone, and the inhibitory nerves do not exert sufficient control over it. Palpitation is frequent.

The symptoms from which the patient complains may be multiform in character. Subjective signs, however, must always be carefully weighed and taken for what they are actually worth. This being a functional trouble only it requires diagnostic acumen to differentiate it from organic disease. It should not be confounded with hysteria, although many cases placed in the hysterical category are only sufferers from a morbidly

sensitive spine. Many cases of neurasthenia in men are simply the result of irritation at the root of the spinal nerves.

Perhaps insomnia and disturbed sleep are the most constant symptoms of this affection. The patient may sleep well for a few hours and then awake in a startled manner only to lie awake the remainder of the night. Pains and an irritable condition of the ovaries in women and of the testicles in men are common symptoms.

If the physician is painstaking in his research he will usually find an absence of the predominant hysteria symptoms, as the globus hystericus, clavus hystericus, paroxysms, morbid craving for sympathy and other moral and psychic symptoms.

The treatment depends in a great measure upon the factors of causation. Rest of body and mind are essential and excesses of all kinds must be scrupulously interdicted. A proper amount of sleep is of the greatest importance. Narcotic drugs should not be used, as the patient may see a fancied reason for their continuance, which may eventuate in the formation of a habit. The writer gives bromidia to produce sleep and nerve sedation. It is a good calmative and leaves no untoward after-effects.

A daily sponge bath has proved beneficial in many cases, but the shower bath when accessible is to be preferred. Static electricity has given gratifying results in many cases. It may be, however, that the glitter and glamor of the machine influenced the patient's minds as much through suggestion as from electricity per se.

In a few unusually stubborn cases the writer has had recourse to counter-irritation. When the pain is limited to only a few vertebrae small blisters may be applied along each side of the transverse processes. Sometimes it may be best to apply several blisters in succession over new areas, but only slight vesication should be produced. In severe cases the actual cautery may be used as suggested by Dr. Brown-Sequard. The results are as a rule gratifying, but the possible shock to a highly sensitive person should be borne in mind.

The usual hygienic and dietetic conditions should not be overlooked. Tonics if specially indicated, may be of service. Constipation should be religiously combated lest autotoxic symptoms be added.

The patient needs reasonable exercise, but should avoid excitement and fatigue. Abundant sleep is the greatest desideratum, as it is during sleep that the nerve cells and centers undergo their repair and are replenished with energy.

THE MEDICAL FORTNIGHTLY

Issued Tenth and Twenty-Fifth of Every Month.

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EDITORIAL

The Medical Value of "Greens."

THESE are days when we look for therapeutic discoveries in the laboratory rather than as an accidental development of bedside practice and the various herb remedies and home treatments which were a few years since popular even with the profession seem to have largely lost their grip in the day of bacteriology and pathology. To one who has a wholesome respect for some of the household remedies it is refreshing to read in the therapeutic value of "Greens" in the Journal of the A. M. A. for March 9th:

"C. Wilson and H. E. Pressly, Birmingham, Ala., report six cases, four of chronic diarrhea and two of amebic dysentery, microscopically diagnosed, which were successfully treated with a diet of "greens" composed of turnips tops. One of these patients, one going where the diet was not to be had, suffered a relapse and died, the others continued well. Other vegetables, such as mustard, phytolacca and spinach are also mentioned as having been used to some extent. The attention of the authors was first called to the remedy by the recovery of an apparently hopeless case on "poke salad" (phytolacca) after leaving their care. Of the two cases of amebic dysentery, one patient had tried all the ordinary remedies and was ready to undergo an appendicostomy or an enterostomy, if it would relieve him, as his condition was extreme. The other was not so bad, but had given up his work and never expected to be able to take it up. Both made good recoveries under the "turnip greens" diet. Wilson and Pressly have also tried it in two cases of well defined gastric ulcer, in one successfully. The other patient was nearly moribund, and while he was able to take the diet better than anything else, it failed to save him. The method of

cooking is important, as it is very unpalatable if not properly prepared. As prepared as a domestic dish in the south, ordinary bacon is used, boiled half an hour, and then the turnip tops, spinach, mustard of phytolacca tops are added to boil from one to two hours."

Having never eaten poke-weed salad, it having been looked upon with disfavor and suspicion in the section where we happened to spend our youth, we cannot speak for it, but of other kinds of greens we can vouch that they are agreeable medicine if medicine they be. We hope it proves true and that, when the truth is demonstrated, we may be allowed to continue eating greens rather than having the "virtue" extracted and dished up to us in capsules.

The Meeting of the State Association.

THE annual meeting of the various State associations is a matter of the early future, and preparations indicate that this is to be an exceptional year in the work of these organizations. The Missouri society meets in Jefferson City, May 16, 17 and 18. A most interesting program is promised, and the other work of the body is equally well worth our interest. St. Louis hopes to send a larger delegation than ever before to this meeting, and an effort is being made to have members arrange their plans to get there Tuesday morning, and to give their undivided attention to the work of the Association from its beginning to the end. It has been urged that members generally should attend the meetings of the first day, which are of a business rather than scientific character; it would seem that we should need no urging for the work done by the official body of the association is quite as vital to us as anything which can be presented of a scientific nature. Those who happened to arrive the second day last year, and who had no hotel reservation, need no suggestion from us relative to securing quarters in advance. There is no excess of hotel accommodation in Jefferson City.

Rubber Gloves.

THAT anyone can have the temerity to speak against the use of rubber gloves at this day and date is considerably surprising, and we are thankful that the suggestion comes from so eminent a surgeon as Dr. Robert T. Morris (Med. Rec., March 9), else we would be fearful lest Jove would strike with a thunderbolt such daring. Against the glove Dr. Morris urges that they make for less speedy work, and that they are used most frequently in cases where speed is most necessary. Slow work reduces the natural resistance of the patients. He declares that what the patient needs is simple, quick work, which merely turns the tide of battle between bacterium and phagocyte. We need discrimination more than we need rubber gloves. Rubber gloves, the writer says, may be useful in cases in which there is no infection of other disease to call out the patient's natural resistance to infection in cases in which dressings are to be changed for several patients in succession, or when the surgeon operates upon an uninfected one. Rubber gloves are not needed—or worse than that—in cases in which infection is already under way, when a disease like cancer has already called out such a degree of protection that a breast could be amputated and primary union obtained under "well-waxed shoemaker's thread" that had been held in the mouth, or when no infection or other disease is present, but where slow operating in gloves will allow more bacteria to fall into the wound than would be carried in by well-prepared bare hands.

Civic Committees of the St. Louis Medical Society.

THE official machinery of the St. Louis Medical Society has been becoming somewhat complicated, and it has been necessary to add from time to time new committees to relieve the few authorized by the by-laws from duties which were growing too numerous. The society has lately authorized the appointment of what are to be known as Civic Medical Committees, these committees have been thought a necessity in order to promote the influence of the society by properly increasing its membership; in order to enable the membership committee to easily familiarize themselves with the standing of applicants for membership; and in order to exercise proper weight in public questions of interest to us as physicians and as citizens; and especially in order to co-operate with the Joint Medical Council in its plans for reform in the management and control of the municipal hospitals.

The city has been divided into districts closely following the ward boundaries, and the following chairmen have been appointed:

1. Charles F. Pfingsten, 2230 College St.
2. Hugo W. Bartscher, 829 Bremen Ave.
4. ———
5. ———
3. Frank K. Boogher, 1101 N. High St.

6. S. T. Vandover, 903 Morrison Ave.
7. Robert E. Schlueter, 740 S. 4th St.
8. Benjamin E. Stockwell, 2645 S. B'way.
9. Hugo Rothstein, 3309 S. 13th St.
10. Jules Baron, 3357 California Ave.
11. Joseph A. Hardy, 6511 Michigan Ave.
12. Philip Heuer, 3520 Victor St.
13. Edward O. Greer, 2750 Park Ave.
14. ———
15. John D. Boggs, 813 N. 18th St.
16. W. U. Kennedy, 1121 Cass Ave.
17. C. W. Parker, 3502 S. Jefferson Ave.
18. F. J. V. Krebs, 1906 St. Louis Ave.
19. Philip Scholz, 1110 Ferry St.
20. John C. Falk, 2701 Stoddard St.
21. Lionel S. Luton, Olivia Building.
22. Norvelle W. Sharpe, 3520 Lucas Ave.
23. Robert H. Davis, 500 Olive St.
24. Albert Habermaas, 3817 Cleveland Ave.
25. Louis H. Behrens, 5 S. Broadway.
26. B. L. Dorsey, 1422 N. Taylor Ave.
27. James Stewart, 4847 Page Ave.
28. Walter B. Dorsett, 500 Washington Ave.

A Ten Year Old Suicide.

Our city was shocked on the evening of March 16th, by full reports in the papers of a suicide pact between two little girls of ten years, and its successful consummation on the part of one. The feature which most strongly impresses itself on us, next to the fact of the child's death, is the fact that she could go to a reputable West End pharmacy and and buy carbolic acid with no physician's prescription, and no order from her parents. At the coroner's inquest the press report states that J. P. Slinger of the Royal pharmacy testified "that he had sold the child a 10-cent vial of carbolic acid. She told him, he said, that the acid was for family use, and asked him to charge it to her father's account. He was aware, he said, that the law requires a druggist to have a written order from a parent or some responsible adult before selling carbolic acid to a minor.

"Mr. Slinger was one of the persons most affected at the inquest, and wept while giving his testimony. He was arrested Friday on the charge of selling poison to a minor, but was released yesterday on a common law bond. The law defines the offense as a misdemeanor, punishable by a fine of $100.

"Mr. Slinger said to a Post-Dispatch reporter that he was aware of the law, but there was a special reason for his giving the carbolic acid to Liebling.

"The Slocumb family has a charge account with me," he said, 'and Liebling has always been the one who came on the errands. She was a child of unusual intelligence for her age. She was not curious, like most children, to see what she had by opening the package on the way home. I knew she could be trusted in that respect.

"Had any other girl come in she would never have been given the acid. Liebling came in at 1:25 p.m. and asked for the acid. She said it was for the family. She was happy and cheerful, just as I had always seen her. 'Hurry up, I want to go to school,' she remarked. When I handed her the bottle she told me to 'charge it' and went out.'

'Mr. Slinger is considered by all the children of the neighborhood as their particular friend, and he is acquinted with practically all of them." All of which is very pathetic and will stir up much sympathy for poor Mr. Slinger. To us this is an occasion for intense indignation. So often have strenuous objections to the sale of poisons, and especially of this poison been voiced that there is absolutely no excuse. A paltry fine of $100.00 does not do the situation justice. Carbolic acid is the common agent used by suicides and a frequent cause of accidental death and it is time that this druggist and all others learn that there is a law regulating its sale even to adults. We regret that Mr. Slinger does not have to face a much more serious charge than a "misdemeanor punishable by a fine of $100.00."

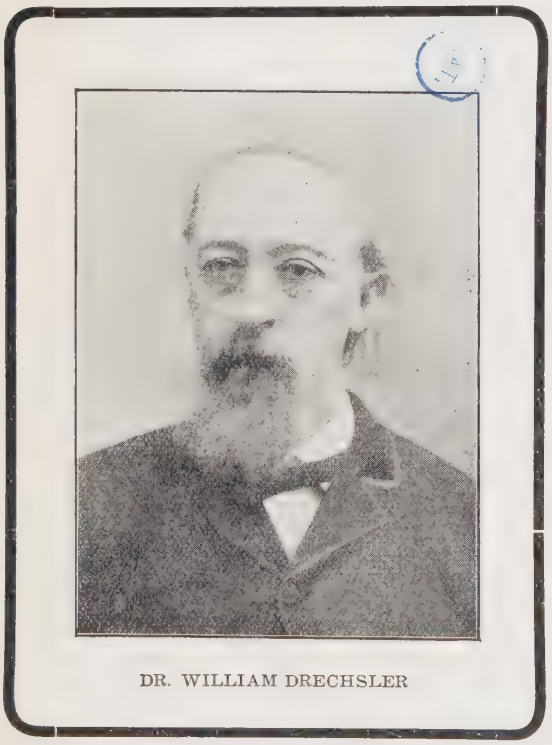
Dr. Jno. T. Hodgen.

The twenty-fifth anniversary of the death of Dr. Jno. T. Hodgen occurs on April 28th. The St. Louis profession is planning services to his memory then. The larger number of those practicing in the city have entered the ranks since the day of Dr. Hodgen, and it is probable that they only partially appreciate the man. Dr. Hodgen was easily one of the greatest men the St. Louis profession has been privileged to number as its fellows. He was honored with the presidency of the St. Louis Medical Society, the Missouri State Medical Association and the American Medical Association. His professional career was one of great brilliancy, and he left behind a record of originality and research which can hardly be equalled by any one man of twenty-five years later. Many of the most brilliant of today's practitioners were students under Dr. Hodgen and gained their inspiration from him. The St. Louis profession does well to honor his memory, and the younger generation, which did not know him, will do well to acquaint themselves with all that can

be learned of him on this occasion; this acquaintance will lead them to heartily join in the honor paid to him.

Death of Dr. William Drechsler.

Dr. William Drechsler one of St Louis' oldest physicians and surgeons, died at his late residence, 2701 Blair avenue, in St. Louis on February 1st, 1907, at 3:40 p.m., from apoplexy, aged 77 years, 7 months and 17 days. Dr. Drechsler was born in Clausthal, Germany, June 15, 1829, the son of a miner in the Hartz Mountains. He came to St. Louis via New Orleans after a sea voyage of fourteen weeks. In a few years he visited Germany, and then returned to the United States, residing in Galveston, Texas, in 1848. After traveling through Texas he returned to St. Louis, which city has since been his residence. He was graduated in medicine from St. Louis University, medical department (sometimes called Pope's College) in 1853. Among his lecturers were Dr. Reyburn, Prince, Linton, Litton, Pope, Pallen and McPheeters. He wrote his graduating thesis on "Saliva in Regard to Digestion." He began practice with his office on 2d and Market. He later moved to Market, between 7th and 8th, the then residence district of St. Louis; he practiced for some years under Dr. Ernst Baumgarten. In 1860 he moved to 18th and North Market street, and in 1871 to his last location.



DR. WILLIAM DRECHSLER

At the beginning of the Civil War he entered the Union army as surgeon in the field; then took charge of McDowell's Medical College, which had been confiscated by the government and turned into a war prison. At the close of the war he re-entered general practice; he had a good practice in accidental surgery. His method of treating fractures was marked by its simplicity in the use of splints with perfect results following. In amputation of fingers his rule was to save all structures possible, and in place of sutures he would use silk isinglass plasters with excellent results. This method of using adhesive strips has appeared in late years as something new. He was well versed in literature and lectured on Archeology, he had in his possession a large collection of implements used by the prehistoric races.

He leaves a widow, Mrs. Caroline Drechsler, two daughters Miss Mathilda Drechsler and Mrs. S. E. Riether and one son, Dr. Louis Drechsler.

In researches on different methods of preparing food, it has been stated that both beef and fish are more digestible in the raw state than cooked, that beef is in general better digested than fish, and that fish is more digestible smoked than in any other form.

Another Journal Consolidation.—Beginning with the issue of April the Medical Era and the Medical Mirror will be merged into one journal and will appear under the title of the former. The exit of the Mirror brings to memory the founder and some time editor, Dr. Love, whose identity was so strongly impressed on the journal in its palmier days, this seems like the ending of another chapter. The Fortnightly wishes the strengthened Medical Era ever increasing influence and success.

The St. Louis Pure Milk Commission is again making preparations to supply pure milk for free distribution in the city the coming summer. This commission, through it certification committee, supervises the production of "certified milk" and issues labels to dairies that comply with all the requirements set forth by the commission. The Certification Committee is composed almost entirely of physicians who give their time gratuitously in the supervision of this work, and one member makes a trip of inspection of those dairies each month which come up to the requirement.

THE REVIEWER'S TABLE

Books, Reprints, and Instruments for this department, should be sent to the Managing Editor, Century Building, St. Louis.

TEXT-BOOK OF PSYCHIATRY. A Psychological Study of Insanity for Practitioners and Students. By Dr. E. Mendel, A. O. Professor in the University of Berlin. Authorized Translation. Edited and enlarged by William Krauss, M. D., Buffalo, N. Y., President Board of Managers Buffalo State Hospital for Insane, etc. 311 pages. Philadelphia, Pa.: F. A. Davis Company, Publishers, 1914-16 Cherry street. (Extra cloth, $2.00 net.)

Dr. Krauss has done the American profession a distinct service in placing within our reach this valuable work in insanity. Dr. Mendel is recognized the world over as one of the foremost psychiatrists of the age and his clinic is the Mecca toward which large numbers of American students turn their faces. The volume before us makes no pretense of presenting all the minutiae of the subject, but it does present the essentials in so attractive and accessible a form as to make most pleasing and instructive reading. This has been the chief object of the author, and his success is most satisfying. The specialist psychiatrist must be conversant with all the authorities, and he will at once recognize the value of this hand-book, the student and general practitioner will find the volume full of practical matter and much better suited to their need than more voluminous texts.

STARR ON NERVOUS DISEASES. Organic and Functional Nervous Diseases. By Allen M. Starr. M D.. Ph. D., LL. D., Professor of Neurology in the College of Physicians and Surgeons, New York, etc. Second edition, thoroughly revised. Octavo, 824 pages, with 282 engravings and 26 full-page plates. Philadelphia and New York: Lea Brothers & Co., 1906. (Cloth, $6.00, net; leather, $7.00, net.)

Whatever a man's work, be he specialist or general practitioner, his library should contain at least one work on each of the several branches of medical science, and the one should give a comprehensive view of the subject. A working library consists much less in the large number of books than in the fact of a few books which are complete, and which make information easily accessible. No work on neurology is better prepared to serve for its specialty in the working library than Starr.

The author's position in the forefront of neurologists has been shown anew in the rapid exhaustion of the first edition of his work, limited though it was to organic nervous diseases. An even warmer reception is assured for this revision, which brings the organic portion to date and adds a section covering the functional diseases, so that the volume now presents the whole field of neurology as understood and practised by a master. The author is the reverse of abstruse or nihilistic. On the contrary, he is straight forward and direct, and justifies his optimism as to the advanced position of neurological diagnosis and treatment by the wealth of information placed at command of his readers. Paying due regard to theory, he devotes especially full attention to etiology, diagnosis and treatment, both medical and surgical. The book is largely based on the solid foundation of long experience, but it also embodies the well-attested knowledge of other authorities as gleaned from a thorough sifting of the vast literature of neurology. Practical, authoritative, covering the whole subject in all its aspects, and abundantly illustrated, this new edition of Prof. Starr's work answers the needs of students, practitioners and specialists.

YALE MEDICAL SCHOOL ADVANCES REQUIREMENTS.—Beginning with the session for 1909-10, the requirement for admission to Yale Medical School will be two years of university work, which must include courses in inorganic chemistry, physics and general biology. Arragements will be made, whereby, through a proper choice of subjects, the students may secure both the B.A. and M.D. degrees in six years.

THE MEDICAL DEPARTMENT OF THE STATE UNIVERSITY is still hovering around Kansas City, and there are indications that is about to light. Some time since negotiations were on to bring the institution to St. Louis, but the inducements were not sufficient, and the matter seems to have been dropped. The school should be in one of Missouri's two great cities, or at least it should do its clinical teaching there, and if it is not to be St. Louis we are entirely in accord with the movement toward the city of the Kaw.

LOUISIANA STATE MEDICAL COLLEGE.—It is reported that ground will be broken within a very short time for the biding for the Medical Department of the Louisiana State University at New Orleans, for which $100,000 is said to be available. The board of supervisors decided on the location of the institution January 26. It is reported that the new institution will be located near Charity Hospital, and that the following will be members of the faculty: Dr. James M. Batchelor, dean and professor of surgery; Dr. William Kohlmann, professor of gynecology; Dr. Milton A. Schlenker, professor of obstetrics; Dr. A. Dana, professor of anatomy; Dr. D. A. Stafford, professor of Therapeutics; Dr. Waldemar T. Richards, associate professor of surgery; Dr. A. DeGrange, professor of physiology; Dr. W. Roussel, professor of dermatology; Dr. Charles N. Chavigny, associate professor of gynecology and Dr. Amedee B. Granger, professor X-ray and electro-therapeutics.

REPORTS ON PROGRESS

Comprising the Regular Contributions of the Fortnightly Department Staff.

SURGERY.

JOHN MCHALE DEAN, M. D.

Coccidional Granuloma.—In Jour. A.M.A. (Vol. XLVIII, No. 9) Brown reports cases of that rare disease, coccidional granuloma. While the disease bears a medical aspect it appears that only prompt intervention by the surgeon was responsible for the one authentic case of recovery. This happened in a man where the disease was localized in the ankle, amputation of the limb was performed, resulting in cure to the patient. The disease is caused by a mould, and in this respect resembles the blastomycetic dermatitis. It is transmitted through the blood and lymph channels, causing in localized areas abscesses and necrosis of bone. The areas begin as small red edematous swellings that when incised evidence creamy or the yellowish sero pus. It may become localized in any organ, but the heart peculiarly seems seldom affected. Administration of kali iodide is followed by no favorable results. The treatment resolves itself into strictly prompt surgical intervention. The mould is capable of inoculation into guinea-pigs. One of the author's inoculations into the peritoneum was successful. On agar its growth is sharp and well defined.

Prostatectomy in Diabetes.—Wiener declares (Med. Rec., Dec. 15, 1906) that the diabetic patient facing a prostatectomy is exposed to three dangers, namely, the anesthetic, hemorrhage, and shock. The dangers peculiar to the diabetic are coma and wound infection. The writer advises the removal of the prostate under laughing gas. He suggests dividing the operation into two stages. At the preliminary operation the bladder is opened under local anesthesia, and after a few days the prostate can be removed through this incision, under gas, in a very few minutes. Under such conditions there need be no fear of coma. The danger of wound infection can be reduced to a minimum by the preliminary incision and drainage of the bladder. Urinary antiseptics may be given both before and after operation, and daily bladder irrigations. The writer has had excellent success in his treatment of these cases.

Gallstone Disease and Duodenal Ulcer.—Graham, Rochester, Minn. (Jour. A.M.A., Feb. 9), reviews the symptoms of gallstone disease and duodenal ulcer with special reference to their differentiation from each other, using for his study 141 cases with tabulated histories. In spite of the most painstaking care there will always be some cases of ulcer undistinguishable from gallstone disease, and vice versa, though to a less extent. The sudden, irregularly appearing pains, unconnected with eating, the lack of history of gastric ailment between the attacks the diaphragm spasm and dyspnea, the less pronounced vomiting and eructation and the slighter relief they afford, are more especially characteristic of gallstone disease. Nausea and intense retching, when they occur, may be followed by vomiting of a smalll amount of thin, yellowish, bitter liquid mixed with mucus. In duodenal ulcer the pain comes on in attacks lasting for days or weeks, and though often sudden and sometimes severe, is of a more gnawing and burning nature, not so intense as with gallstones, and clearly related to food, its intensity being often modified by the kind and quantity of food taken. It may be irregular as to the time of the separate attacks, but is regular during the period of stomach disturbance. It is relieved for a time by food and hot drinks, soda and irrigation give relief. Spasm of the diaphragm is rare except in case of perforation. The chronic gallstone case with impacted stone, ulceration and adhesions, without jaundice, and with predominating gastric symptoms, such as gas, sour belching, moderate pain following eating, dilatation and impaired appetite, will be too often diagnosed as ulcer; while the duodenal ulcer with an early history of irregular attacks of sudden, sharp, intense pain of peritonitis, without obstruction or hyperacidity, with no gas, vomiting or sour eructations will be as surely mistaken for gallstones. It is these early acute types with tendency to perforation that are most frequently confused in the diagnosis. Early ulcer is more often mistaken for gallstones than is early gallstone disease for ulcer, while in the chronic forms of both conditions the reverse is apt to be the case.

Treatment of Acute Diffuse Peritonitis.—Douglas (Med. Rec., Feb. 23, 1907) concludes that peritonitis is not always the same disease; that many factors, chiefly bacteriologic, determine its onset, course and ultimate termination, and that, therefore, there is no one treatment for peritonitis; no method applicable alike to all cases. He disapproves of irrigation because it disseminates infection and removes the phagocytic cells He employs gauze to coffer-dam the field of operation, and much of the fluid in the abdominal cavity will be absorbed by this gauze packing. Such fluid as comes within easy reach should be taken up with gauze pads, but the forcible thrusting of gauze sponges between

intestinal coils is condemned. Placques of fibrin on the intestines, he states, should be left undisturbed. When quantities of foreign matter are disseminated throughout the peritoneal cavity Douglas employs irrigation; otherwise not. When evisceration is necessary he thinks enterostomy and emptying of the intestines through a Paul tube is the proper thing. He says that drainage of the general peritoneal cavity is physiologically impossible, and that the discharge from the drain is largely due to the irritation of its presence. Douglas does not believe in the Ochsner treatment nor in the Fowler position.

Abdominal Surgery.—The 1,000 cases reported by Swain (Brit. Med. Jour., Feb. 9, 1907) include 101 operations on the ovaries and tubes, 75 on the uterus and road ligaments, 127 for hernia, 229 for appendicitis, 49 for diseases of the liver, gall bladder and bile ducts, 65 on the kidney, 126 for diseases of the stomach and intestines (excluding hernia and appendicitis), 29 on the urinary bladder and prostate, and 24 for tuberculous peritonitis and peritoneal adhesions. Some of the comments made by Swain are particularly interesting. For instance, he invariably puts a double ligature on all structures in the abdomen and pelvis that have been ligatured before being cut away, the second ligature being applied after the division of the tissues. He does not advise the removal of all myofibromatous tumors of the uterus of cases for operation. In young women Swain chooses myomectomy, provided that the general condition of the patient is fairly satisfactory, that the tumor does not extend much above the umbilicus, and that there are no important complications, such as severe inflammatory disease of the tubes and ovaries or advanced anemia. In cases in which myomectomy is undesirable, he prefers the operation of retroperitoneal hystero-myomectomy. When the myofibroma is associated with malignant disease he removes the uterus and tumor. For cases of cancer of the uterus that are diagnosed early he believes that colpohysterectomy is the best operation, although in some cases abdominal hysterectomy must be resorted to. Swain is not convinced of the desirability of performing cholecystectomy as a routine measure in the operative treatment of cholelithiasis. He thinks that recurrence of the gallstones after operation is rare. He has not seen a case. He has not performed cholecystectomy, except for carcinoma of the gall bladder, permanent blocking of the cystic duct, and in an atrophic gall bladder which could not easily be dealt with in any other way. Speaking of nephropexy, he says that when belts fail operative measures are indicated in healthy adults in whom a freely mobile kidney is associated with symptoms of gastric crises or of torsion of the renal vessels. He claims that of those cases of movable kidney that do give rise to symptoms distinctly referable to the renal mobility, probably at least two-thirds are better treated by some form of belt than by operative fixation. For the radical cure of hernia Swain prefers a modification of Kocher's method for the ordinary run of cases, Bassini's method being reserved for large hernias of old standing with a widely dilated external ring. In the performance of intestinal resection Swain prefers the use of a simple suture to that of mechanical appliances; Halsted's quilt suture is his choice. In stomach surgery he always performs the posterior operation of gastrojejunostomy. When the duodenum can be freed Kocher's lateral gastroduodenostomy is the routine measure. Frank's method of gastrostomy is the one usually adopted by Swain when that operation is indicated.

Surgery of the Spinal Cord.—The surgical diseases and lesions of the spinal cord, contusions, concussions, punctured wounds, hemorrhage, fractures and dislocations, gunshot wounds, spina bifida, syringomyelia, etc., and their management, are reviewed by Murphy, Chicago (Jour. A.M.A., March 2). He holds that when the axons and ganglion cells that make up the substance of the cord above the cauda are destroyed, regeneration is impossible, and, therefore, in gunshot or stab wounds with immediate paralysis, operation is useless as regards hope of repair except in the caudal zone, where the possibilities are the same as in the case of wounds of peripheral nerves. Hemorrhage, concussion and contusion without laceration may give rise to the same immediate symptoms as division, and a positive differential diagnosis is impracticable. The time and order of appearance of symptoms may be the only guides; there is no direct relation between the severity of the trauma and the degree of injury to the cord. Absence of immediate paralytic symptoms is not a guide—they may appear after days or weeks. Early spinal puncture may relieve paralysis due to hemorrhage which in some cases may be as complete as that due to division of the cord. Most patients with incomplete paralysis following fractures recover without operation, and when the displacement is not great the physician is justified in assuming that the cord is not suffering continuous compression and in refraining from operation. The special indications as regards operation in the various conditions above

enumerated are pointed out and the technic of laminectomy is described. The danger of delay in conditions calling for operation, especially in non-malignant tumor, tuberculoma, etc., is emphasized. Late operations after necrosis in the cord has taken place are worthless. Surgery of the spinal cord, like surgery elsewhere, must be timely, i.e., before the pathologic condition has passed the possibility of repair.

Hare Lip and Cleft Palate.—Brown, Milwaukee (Jour. A.M.A., March 2), disbelieves in the early operative treatment of hare lip and cleft palate in infants, holding that the children thus deformed are apt to be otherwise defective and therefore less resistant to injury or disease than they will be at a little later period of life. Very early operation is moreover liable to affect injuriously the normal development of the other facial bones and to cause nasal stenosis, and is not more favorable to insuring better speech than are the later operations. The difficulty of taking nourishment can be met as well by the use of strips as by early operation, and he would use these and change them from day to day, always endeavoring to increase the tension as tolerance is acquired. Usually it takes ten days or two weeks to get an infant properly prepared and the unequal division of the jaw corrected with the anterior portion of the palate fissure drawn back sufficiently to make operation practicable; though it is frequently advisable to wait till the child is three or four months old to let it get strong and vigorous. Then in most cases, he would only close the lip, leaving the palate closure till the child is about eighteen months old, when, if it is strong and in good health, he would close it throughout. If not, he would close the hard palate and leave the velum till a little later. The first thing in any case is to get the child in proper condition. Operation should be delayed until it can be done with safety, but, instead of allowing deformity to increase by adverse muscular action, during the waiting period, he would correct this by proper methods as much as possible. The operation itself he would divide into a series of comparatively slight operations, as less dangerous to life and reducing shock and also tending to better results. The time of the operation and the amount of anesthetic should be reduced to the minimum and the loss of blood by hemorrhage should be resorted as soon as possible by the aid of normal salt solution and the use of nutrient fluids. Difficult cases with unusually wide palate fissures should be put into better operative form by mechanical means before attempting final closure. The alimentary tract should be kept in order and dangerous germicidal agents should be avoided. Use alcohol and scrubbing to prepare the mucous membrane before operating and use applicators dipped in dioxygen for the palate in postoperative care. Watch respiration after operating to see that there is sufficient space left needed oxygenation. Aim to avoid periods of stress and give sufficient time for recovery between operations and yet have lips hard and soft palate complete, before speech habits have an opportunity to become fixed.

THERAPEUTICS.

W. T. HIRSCHI, M.D.

Digalen (Digitalinum Soluble Cloetta).—Viel (Muench. Med. Wochenschrift, No. 4, 1906) experimented with digalen in a number of cases of acute cardiac insufficiency and chronic cardiac affections. He used intravenous injections for acute conditions, and per os for chronic cases. Subcutaneous injections were very painful and frequently produced inflammatory reactions, and were seldom used. Intramuscular injections were less painful than subcutaneous, but more so than intravenus. For protracted internal administration he sees no advantage of digalen over other digitalis preparations, since gastric disturbances frequently set in, and diuresis is benefited only temporarily. In acute cardiac affections (especially cardiac insufficiency resulting from infectious diseases) it is a most useful remedy, and may safely be given immediately before or during a crisis (e.g., in pneumonia). He uses 5 ccm for each injection, and repeats the dose whenever indicated.

The Use of Atropin to Overcome Nausea and Vomiting Following the Use of Morphine.—Simon (Arch. Int. Pharmac. and Therapie) administered morphine to dogs and followed them with atropine, which reduced the nausea and vomiting markedly. Medium doses of atropin act promptly in most cases. He attributes the effect of atropin to several factors. Atropin stimulates the respiratory center and indirectly depresses the vomiting center. It reduces the salivary flow which also helps to suppress nausea and vomtiing. Atropin also excites the cerebral cortex and the vascular supply of the cerebrum, both of which aid in suppressing the nausea following morphine injections. Simliar results have been observed in human beings, and the writer advises the combined use of morphine and atropine in people who easily become nauseated from morphine.

Experimental Examinations of Gastric Secretion in Human Beings.—(Bickel, Deutsch Med. Woch., No. 3, 1906.)—A young individual with an esophageal stricture resulting from lye intoxication was used for these tests. A gastric and an esophageal fistula were made, and the stomach appeared entirely normal. Various stimuli, such as tasting and smelling, also chewing food excited gastric secretion, or if the secretion had already taken place it was materially increased. He found the quality of the various free and combined acid quite constant, but the quantity changes materially with different stimuli. The quantity is influenced by nervous and psychical conditions, by the amount of fluids in the body and the amount of chlorides which it contains, and by the nature of the stimuli. The conclusion is made that the symptoms resulting from hyperchlorhydrie, are due to changes in the quantity of the gastric secretion, and to changes in gastric motility and the treatment must be directed accordingly.

Acute Gastric Dilation and So-called Arterio-Mesenteric Bowel Occlusion.—(Neck, Munch. Med. Wochen., No. No. 32, 1906.)—The patients usually present most or all of the following symptoms. Sudden and severe vomiting, pains at times intense in various parts of the usually distended abdomen; pulse small, soft and frequent, temperature generally normal. Frequently there is an encapsulated fluid in the left abdominal region due to fluid in stomach. The dilated stomach is most easily recognized by means of the stomach tube. The treatment consists in first relieving the distended stomach by placing the patient in the recumbent position with elevated hips and the use of the stomach tube, to remove the above referred fluid. Operative treatment is usually unsatisfactory. If the use of the stomach tube and elevated pelvis do not afford some relief, the condition is most likely to be due to a high occlusion of the bowel and a laparotomy should not be delayed. A suitable diet and rest are very essenital in the after-treatment.

The Treatment of Gonorrheal Epididymitis.—Schindler (Deutsch. Med. Woch., No. 51, 1906) reports a number of acute cases in which he punctured one or more times with a rapid decline of fever, pains, tension and resorption of the exudate. The good results are due to the lessened tension, improved circulation and better absorption following the puncture. The puncture should be made in the most tense, tender and congested area. A local anesthetic is usually not necessary, since the puncture produces little pain. Warm applications should be made following the paracentesis. At times the punctures must be repeated a number of times. The course of the disease is reduced about one-half by this method of treatment. Often a purulent fluid is recognized sooner by puncture than by any other method. The patients usually need not remain in bed and can be treated in the office if punctured, while if treated by means of stasis or hot applications, they should remain in bed for some time, in order to insure good results.

Hypodermic Administration of Caffeine and Camphor.—(Dr. A. Claret, Les Nouveaux remedies.)—In cases of septicemia and in heart failure, it is sometimes desirable to administer a heart tonic and diaphoretic such as the following

℞ Caffeninae..... 0.25 gramme
Sodii salicylate....aa
Aquae destillatae..... 1 c.c.
Misce et adde
Spiritus camphorae (10%). 1 gramme
(or 1.25 c.c.)
Ft. sol.

This solution contains about 0.25 caffeine and 0.10 camphor, the usual dose of these remedies. It remains clear for several months and does not cause abscesses if combined for hypodermic injection, as follows: One c.c. of above solution is added to 3 c.c. of pure sterilized glycerin. The combination when used hypodermically causes some burning pain at the point of injection, but this is only temporary. The quantity for injection (4 to 5 c.c.) is rather large, and requires a syringe such as is used for serotherapy.

Hydrotherapy in Tuberculosis.—Of 1,000 tuberculosis patients treated by hydrotherapeutic measures by D. Kuthy (Blätter für kli. Hydrother. and Therapeutical Review), in Budapest only 15 per cent were discharged without any improvement, while from Belzig at Berlin, 42.5 per cent were discharged thus; of his patients admitted in the first stage, 53.9 per cent were discharged clinically cured; of the Belzig patients only 39 per cent. There is but one difference in the treatment as carried out in the two institutions, at Belzig douches are the only hydrotherapeutic measures employed; at Budapest each individual receives any form of hydrotherapy deemed likely to prove beneficial. The patients well enough to be about are treated most frequently with the half-bath; the patients who are kept in bed are treated by cold washing of the entire body in the morning and cold compresses to the trunk, changed every two or three hours. The duration of the half-baths three minutes, the temperature of the water at first is 89 deg. F., and is gradually reduced to 82 deg. F.; while the patient is in

the water he is well rubbed. The treatment improves the appetite, regulates the bowels, acts as a tonic, improves the sleep, betters the subjective state and is a mild hardening agent; with neurasthenics the water must not be below 5 deg. F., otherwise they become irritable and restless. The bath is not used to reduce fever; patients with fever are better kept quietly in bed, nor would it be good to remove from them too large quantities of heat, as their fever is due to a breaking down of tissues; the cold water increases cough; such patients are treated to much greater advantage with the cold water compresses. The entire trunk may be covered with a cold, wet bedsheet and this covered with a dry one and the patient thus placed in an evaporation bath. If adhered to for some time patients even in the third stage will have their fever reduced to normal and feel themselves much better; their appetite often improves remarkably. The cold wash of one part after the other very morning takes the place of the half bath above mentioned. Douches are used by him but little; they are altogether contra-indicated in neurasthenics, where there is a tendency to fever production, tendency to pulmonary hemorrhage and pleural pain. Foot baths and cold applications to the calves are good to reduce the temperature and induce sleep. Cold applications over the heart reduce cardiac irritabiilty, just as warm applications over the stomach reduce gastric irritability.

OTOLOGY.

ALBERT F. KOETTER, M. D.

Therapy of Artificially Induced Hyperemia. —(Compilation from the Internationales Centralblatt fuer Ohrenheilkunde—Dr. Haymann, Breslau.) — The brilliant results achieved by Bier through local hyperemia in acute suppurations and inflammations of different etiology on the extremities, body and head, suggested the test of this method in corresponding diseases in otology and rhinology.

At the Surgical Congress in April, 1906, Bier reported that 28 cases of suppurative otitis, of which 27 showed mastoiditis, were treated, at the clinic in Bonn, by artificially induced hyperemia. Seventeen were acute cases, viz., the suppuration had not existed for more than two months. Of this number sixteen healed with good function of hearing, without any other therapy than that of stasis and small incision in the mastoid-process.

In his book, "Hyperemia as a Curative Remedy," Bier treats the engorgement therapy in ear suppurations in an extensive chapter, and cites a great many cases treated with excellent results.

The technique used, which has also served others as a guide, is as follows: A bandage as means of engorgement was used, around the neck as the most plausible place to consider. As the plentiful blood supply of head and face, and the sensitiveness of the neck, the pressure need not and should not be very strong, a simple cotton, rubber bandage with hooks and eyes is sufficient. The proper degree of engorgement is reached when the face assumes a bluish red color and appears somewhat bloated. In inflammatory complications of the mastoid process an edema appears behind the diseased ear. The bandage remains in place twenty-two out of twenty-four hours; if necessary to guard skin, the bandage may be padded with cotton batting. Pus retention if present or suspicioned in the tympanic cavity or over mastoid process should be relieved by paracentesis, respectively incision.

According to this method a number of cases were treated, partly acute and partly chronic suppurations of the ear at first without selection or special indications, only to learn the influence of this procedure on the different variations of ear suppurations. The result divided the cases into two groups. In the acute suppurations, even though all complicated with mastoid disease, mostly superiosteal abscesses, according to existing opinions indicated opening of the mastoid, the results were surprisingly good. By means of the engorgement bandage and small incision at the highest point of mastoid swelling a cure occurred in about four weeks. Less flattering were the results in chronic suppurations. Aside from those forms where cholesteatoma and extensive bone sequestrium prevented a retrogressive metamorphosis, acute exacerbations of chronic suppurations healed without trouble. Remarkable in all cases was the prompt relief from pain, and the sharp limitations between diseased and healthy bone in those cases which came to operation.

Less enthusiastic are the reports of Heine, who treated a number of ear suppurations according to Keppler's method at same time. Of 19 different and difficult middle ear suppurations, nine were healed entirely, in two cases the mastoiditis disappeared, at least externally; eight were operated in spite of treatment. The only favorable results were had in the cases of abscess formations over the mastoid. But even with this we must remember that perhaps the incision influenced the entire condition. Cures were obtained formerly by the now abandoned

Wilde's incision. Several details follow for further elucidation: Of five ear suppurations with infiltration of mastoid process, one was completely cured by the engorgement therapy, in one the mastoid complication disappeared, but the suppuration continued, a Bezold mastoiditis was improved, only a slight secretion continued, two were operated. Of six ear suppurations with mastoid tenderness on pressure, four were operated. In one patient on whom the engorgement therapy was used for an acute otitis media, a mastoiditis developed during the treatment that had to be operated. As to the influence on the acute uncomplicated otitis Heine can draw no conclusions on account of the limited number of cases observed and the conditions to be considered, as etiology, further the general condition, then external moments as rest in bed, may change the picture of the disease so that only in a great number of similar cases the therapeutic action can be shown in the proper light. Stenger treated eleven cases of acute otitis media by Bier's method. Of this number seven recovered rapidly by the engorgement bandage, one was operated, and in three no improvement was realized. The course of the disease especially the pain, were favorably influenced. In complications on the part of the mastoid process, Stenger used the following suction engorgement combined with the operative procedure. On the highest point of the inflamed mastoid process swelling he made a small incision and with a narrow chisel made a small canal to the antrum, eventually using an already present fistula. This canal he tampons with a gauze drain and covers the whole with a suctorial disc. On the first day three hours suction was used, and the next a little less, until the wound was filled with granulations and the discharge had ceased. Seven cases treated in this manner healed in proportionately twenty-two days. If, whether in this method, the hyperemia or the chiseling and the suction, caused the withdrawal of the secretion, and was the healing factor, is questionable. Nevertheless the absence of large scar, the avoidance of large bone defect and the shorter after-treatment are a decided advantage of this method.

Further reports were published by Fleischmann of the Politzer clinic of nine acute uncomplicated cases, six healed under engorgement therapy in the same time as was needed for the old treatment, three healed after the usual treatment was introduced. Of twelve cases of mastoiditis, treated by engorgement four healed, four grew worse and were operated. In four others where periosteal abscesses of the mastoid process were present one was not operated, and in three the operation was only postponed. In two cases of long standing suppuration with acute exacerbated mastoiditis, the external symptoms of inflammation disappeared, the operation necessary later showed that the diseased process as such had not been influenced. These cases show, according to Fleischmann, a danger of the engorgement therapy, namely, that the severe acute symptoms were moderated, but the picture of the disease was clouded and an apparent improvement noted, nevertheless the disease process continued uninterrupted. The pain soothing action was not very marked. To this report of Fleischmann's, Hasslauer replies that most of these cases were treated in the clinics, and therefore allow no safe conclusions, as they can offer no guarantee that the instructions were properly executed. Hasslauer himself has treated thirty-six cases by this method. The acute cases, twenty-three in number, were favorably influenced. Four were mild cases, twelve showed severe inflammatory symptoms, partly hemorrhagic with vesicular formation. Four healed in proportionately eight days without paracentesis, the others were incised and healed in about sixteen days, one in fifty-one days. Two were operated, one according to Stenger's method. Of the remaining seven cases three healed without complications very rapidly, two were operated and two, including an exacerbated mastoiditis, healed after the use of Stenger's method. The results were satisfactory in the acute cases. Whereas, in the chronic cases the course of the disease was not influenced, with the exception of one case. As a general rule the discharge was stopped by the use of the ordinary therapy. A remarkable accompaniment was the frequent appearance of accidental external otitis in spite of cleanliness.

In Schwartz's clinic the engorgement therapy was given a thorough test. Eleven cases of acute and one of chronic suppuration were treated, nine showed mastoid complications. Of the twelve cases, four, all diplococcus infections, had to be operated. In these cases the general condition as well as the ear trouble improved under treatment, but this improvement was only an apparent one. Under severe disturbances a setback occurred that lead to operation. And in this it was shown that the engorgement therapy had only effaced the symptoms, but had not in any way affected the disease process. The other eight cases were all cured but two. Here the time of healing was shortened by the engorgement therapy. Subjectively the pain moderating affect was remarkable.

Kopetzky treated seven acute otitis medias with mastoiditis, and one subperiosteal abscess according to Bier's method. He in-

creased the hyperemia by having the patient lie with feet elevated. The results were flattering, the hyperemia was well borne, the best effect was obtained by Kopetzky in persons of strong constitution and early application of the bandage. The function of hearing returned to normal better and quicker than in the ordinary therapy. As a counter indication for its use are kidney and circulation diseases, as well as metabolic processes. These are in general the results published at the present time as regards the engorgment therapy in diseases of the ear. The different and very often diverging opinions of the individual investigator show at best how far we are from a final conclusion. Examinations of large clinical material, homogenous cases if possible, will add more light as to the choice of proper diseases, particular indications, to decide the therapeutic value of the procedure. This much has been proven, that thn engorgement, is as a general rule, borne well and has a pain moderating action. Also that acute processes, especially mastoid complications with abscess formation are favorably influenced. I would refer to the details of Schwartze read before the Medical Society at Halle, in which he states his views: Further clinical tests will decide which forms and at what stage of the inflammation the engorgement is proper, and how long the operation may be delayed. The stasis is not without danger, because necessary surgical interference may be delayed and neglected. It is not to be recommended for general use. Its protracted use is dangerous in diplococcus otitis, it is absolutely forbidden in arterio-sclerosis and intracranial complications.

In diseases of the nose and its accessory cavities, the pharynx and larynx the Bier's method was also tried. It was used in two ways, as suction engorgement and head engorgement with neck bandage.

Several years ago Rethi and Seifert used negative pressure by reversed Politzer method in diseases of the nose and the accessory cavities to withdraw secretion. Even though this was done for diagnostic purposes its therapeutic value was mentioned. On the same physical procedure rests the method of Sondermann. His object, aside from the removal of secretion, was to act on the respective mucous membranes within range, by artificial hyperemia in the same manner as Bier. For this purpose he constructed an apparatus in the form of a hollow cup fitting air-tight to the nose, by means of a rubber bulb, with valve, the air may be reduced as desired. The escape of air into the pharynx is prevented by swallowing or intonation. Several cases of ozena and diseases of the accessory cavities were treated Healing, free from objections, were not obtained, even if the regular sucking off of the secretion is judicious, an effective hypermia cannot be produced during the short time in which the velum palati shuts off the escape of air. In nasal suppurations of children this method was also tried. Honneth, who in a large number of nasal and accessory diseases used suction according to Sondermann's method values the diagnostic use very highly, but he doubts if the time mentioned by Sondermann is sufficient to cause an effective hyperemia, and if the hyperemia acts on the degenerated mucous membrane at all.

Uffenorde also tested this suction method clinically and experimentally. As to the question of the hyperemic action he remarks that the engorgement by means of a bandage according to Bier would have more chance of success. Lately Sondermann has reiterated the advantages of his method and explained in detail different points, Guyot in after tests of Sondermann's method obtained the same results.

Spies tried hyperemia of individual mucous membranes in dry catarrh of the upper air passages, by means of a suction pump to act therapeutically. Definite results are not obtainable. By suction in the nasal cavities the author reached through intonation, respectively pressing on the velum plati with a probe, such a splendid closure that patients could swallow and breathe easily. But often the closure lasted only a short time.

Prym tried the suction engorgement, especially in diseases of the faucial tonsils. He used a suction glass which fitted the tonsil and to which was attached a glass tube and rubber for air reduction. This he applied, if possible, twice daily, for five minutes. The main result consisted of a sudden disappearance of all subjective symptoms. Very often the course of the disease was favorably influenced. In chronic anginas he achieved good results. But he did not succeed in reducing hypertrophied tonsils, although theoretically Prym believes it possible. Polyak and Raudnitz used it in inflammations of the naso-pharyngeal space, the posterior pharyngeal wall, in phlegmonous angina and retropharyngeal abscesses, perhaps after small incisions, suction engorgement with the necessary instruments.

Schmieden suggested a suction apparatus for the whole head. It was especially adapted for the treatment of lupus of the face, as the intensity of the bandage engorgement was not sufficient. With this apparatus a sufficient hyperemia can be induced without danger. Even though a favorable influence of the disease process was obtained by the suction en-

gorgement its use was limited to a narrow field on account of technical reasons. Everywhere, especially where a continued hyperemia was indicated the bandage engorgement, as described above in ear diseases, was given the preference

Henle used stasis in six cases of coryza, the results, with one exception, were good. This one was a chronic case in which the bandage on account of external reasons could only be worn a short time. Henle used this method on himself and especially emphasizes the rapid decrease of the unpleasant sensations as head pressure, tickling sensation and tearing of the eyes.

Hochhaus treated twelve anginas and thirty-six cases of diphtheria with the engorgement bandage. In the anginas the therapeutic affect resulted in alleviation of the throat symptoms, difficulty in swallowing and shortening of the course of the disease. The diphtheria cases, in comparison to those treated without stasis, the local symptoms disappeared more rapidly, a diminution of the disease of the deeper air passages was not noticed. Of course the experiments suffered because in most cases serum treatment had been inaugurated, wherefore an opinion, free from objections, as to which is due to serum and which is due to stasis was impossible. Nevertheless Hochhaus had the impression that the engorgement shortened the course of the disease. The bandage remained in position sometimes four days.

A large class of experiments in diseases of interest to us are reported by Polyak. Two acute antrum of Highmore inflammations, one acute coryza were healed in a short time by the stasis bandage. Four anginas, one edematous pharyngitis were favorably influenced, subjectively and objectively, partly through bandage and partly through suction engorgement. In one angina a severe phlegmonous inflammation developed in spite of the stasis. In acute and chronic diseases of the mucous membranes of the nose and nasopharynx the bandage and suction engorgement were combined. The acute cases of which there were two, do not allow of any conclusions on account of their small number, and the chronic for the reason that none were treated until cured. Disappearance of the subjective symptoms, remarkable easy removal of the crusts was noticed. Two cases of suppurative parotitis and one angina Ludovici, in which extensive incisions had been made, were influenced favorably. A case of tuberculosis of the tongue showed some improvement.

In one disease, in which according to its character should be influenced by the engorgement therapy, namely ozena, Fein used this method. For according to our knowledge it is to be assumed that here an increased blood supply and lymph movement would act with good results. Fein used neither the suction nor the bandage engorgement of the neck. The former was not used for reasons mentioned above, and the latter for the reasons that it was doubtful if sufficient strong and continued hyperemia of the respective mucous membranes could be obtained. Therefore he tried a direct compression of the veins. Of the different vein plexus of the nose practically only two were considered, the one more superficial, comes from the posterior turbinates; the other lying deeper goes through the spheno-palatine foramen into the pterygo-maxillary fossa. The first could be compressed by Bellocq's tampon. The liquefaction of the secretion observed might as well have been due to disturbed passage of air as through the hyperemia. The direct engorgement of the aperient vessels in the foramen spheno-palatine was thwarted by technical difficulties. Starting with the same deductions as Fein, Rethi tried venous compression at the posterior nares margin. In order, at the same time, to supply sufficient air passage he used oval rings covered with gauze, fitted in form and shape to the choanal opening, which were introduced in the manner of Bellocq's tampon. The objection, that here analogous with the Gottstein tampon the liquefaction of the secretion is effected, by this compression which involves only choanal margins, is not correct. That nevertheless the crust formation and the fetor were controlled, may be due to the engorgement, respectively hyperemia.

If we survey the engorgement experiments in rhinology we notice that they are less frequent, less unanimous and less encouraging than in the diseases of the ear. But in one point they all agree, namely, that the engorgement is borne well and eases the pain, even sometimes disappearing entirely. Analogous with sub-periosteal abscesses of the mastoid are diseases of the superficial vascular region, viz., skin of the face, these were engorged by the author occasionally and influenced more intensely than the sinus diseases.

As a closing remark I should like to make the following statement: The idea that in the inflammation a safeguard of the organism appears that should be supported and not combatted have been demonstrated to us in the ingenious deduction of Bier and through the manifold success in all branches of surgery, and has been of practical value. As to the question if in those regions of otology and rhinology to be considered, there really occurs a hyperemia

through the engorgement by means of the bandage, has not been explained fully by any observer. This is simply adopted as a fact. Even the oft modified technique seems to show that the degree of engorgement reached has not been satisfactory. Keppler states that the bountiful vascular supply of head and face guarantee an easily induced hyperemia. But just this splendid vascular supply with the many anastomoses, in part with the very badly controlled off flow (vertebral and deep neck veins) renders difficult the engorgement. Polyak mentions that the patient first complains of fulness which soon disappears, an observation that can be easily explained by the experiments of Fein. He experimented very thoroughly as to how and whether a hyperemia of the interior of the nose really occurs and came to the conclusion that regardless of a passing hyperemia, no engorgement takes place. Renner emphasizes the fact that a venous hyperemia is often observed in the fundus oculi.

As to the question whether and how far a hyperemia of the region involved occurs the following experiments were made. In a number of ear diseases, acute and chronic otitis media, with large tympanic membrane perforation. The tympanic mucous membrane with its visible vessels was thoroughly inspected as regards swelling and fulness, then the bandage applied and the observations continued for a longer period. Changes which might have been laid to hyperemia were not observed. Also in radical operations cavities that were healing this procedure was tried and the same observation made. In acute mastoiditis, sinus exposure on the operating table, the engorgement bandage was applied with rather energetic pressure. Here hyperemia and hemorrhage were observed only in the external soft parts. Antrum and tympanum remained unchanged. In the same manner the interior of the nose was observed in a number of cases before and after the application of the bandage, and here the results of Fein were ratified. A marked swelling and increase of volume soon occurred, especially of the inferior turbinates, but this disappears after a time. In all cases the fundus oculi was examined by experts for venous engorgement, each time with negative results. These experiments show that an engorgement, of the region here involved, by means of the bandage, is not to be taken for granted. Even theoretically this conclusion is supported by the anatomical relations of the vascular system here considered.

THE problem of life is not to make life easier, but to make men stronger.—Jordan.

MUNICIPAL REGULATION OF PRIVATE HOSPITALS.

The most important act of recent legislation eminating from the local Council and House of Delegates is an act to regulate hospitals, sanitariums, lying-in establishments, lock hospitals, homes, retreats or other places or institutions intended for the boarding, lodging, nursing or care of the sick, or persons such as are suffering from or afflicted with bodily or mental ailments, or ailments of any kind whatsoever, or pregnant women, or institutions for the care of orphans, vargant or destitute children, foundling homes or dispensaries. This act has passed both branches of the Municipal Assembly and there is no question about the signature of the mayor which will be the final step before it shall be effective.

The subject is one of such tremendous importance that it seems surprising that it has been so negligently handled by previous enactment. The new law was prepared by the combined effort of the best medico-legal talent in the city and we have to thank the medical member of the council (Dr. Marks) who has devoted much energy in its behalf. The act reads as follows:

Section 1. From and after the passage and approval of this ordinance no person shall establish, maintain, operate or conduct a hospital, sanitarium, lying-in establishment, lock hospital, home retreat, or other place or institution intended for the boarding, lodging, nursing or care of the sick or such persons as are suffering from or afflicted with bodily or mental infirmities or ailments of any kind whatsoever, or pregnant women, or an institution for the care of orphans, vagrant or destitute children, a foundling home or a dispensary, within the limits of the city of St. Louis, without first having obtained a permit so to do from the Board of Health, as in this ordinance provided.

The word "person," as used in this ordinance, shall include the members of any firm or partnership, a corporation, and any or all of the officers, managers or board of directors of such corporation.

Sec. 2 Any person who may desire to establish, maintain, operate or conduct a hospital, sanitarium, lying-in establishment, lock hospital, home, retreat or other place or like or similar institution intended for the boarding, lodging, nursing or care of the sick or such persons as are suffering from or afflicted with bodily or mental infirmities or ailments of any kind whatsoever, or pregnant women, or an institution for the care of orphans, vagrant or destitute children, a foundling home or dispensary, in the City of St.

Louis, from and after the passage and approval of this ordinance shall first file a written application, addressed to the Board of Health, requesting said board to grant to the applicant therein named permission and authority to establish, maintain, operate and conduct the kind of institution therein described, which application shall contain the following information:

First: The name or names of any and all persons who are to control, operate or manage such institution, including the matron, superintendent, resident physician or surgical, medical staff, including any and all physicians or surgeons who are in any manner connected or identified with such institution; also the names of any midwies attached to or connected with the institution; and if a corporation, then also the names of the officers and board of directors.

Second: The location of the proposed institution and the name under which said institution will be operated or conducted.

Third: The size and dimensions of the building or buildings and the number of rooms in such building.

Fourth: The maximum number of patients that the institution can properly accommodate.

Fifth: Whether any other business is or will be conducted or operated in the same building or buildings or on the same premises, and if so, what other business.

Sixth: A written statement from each member of the medical staff, the resident physician or surgeon, superintendent, and matron, certifying that he or she will serve on the staff of said institution as stated by the applicant in the application for such permit.

Sec. 3. Upon the filing of such application the Health Commissioner shall cause the building or buildings and premises to be thoroughly examined and inspected, but no building shall be used for any of the purposes herein specified which does not, among other things, conform to the following requirements: Every room, including water-closet compartments and bathrooms, shall have at least one window opening directly upon the street or upon an areaway, a yard or court; the total area of the windows in such room shall be at least one-eighth of the superficial area of the room, and one-half of the sash shall be made to open full width.

If as a result of such examination, it shall be found that the building or buildings and premises conform to the requirements of this ordinance and the Health Commissioner shall be of opinion that the building or buildings and premises are in all other respects in a sanitary condition, that the satements made in the application for a permit are true and the applicant is a person of good character, he shall refer such application to the Board of Health for its action, with his report and indorsement thereon.

Sec. 4. In all cases in which the Board of Health shall act favorably upon any application, it shall issue a permit authorizing the person named therein to establish, maintain or conduct an institution of the kind described in the application for such permit, under the name and at the place designated in such application, for the period of one year from the date therof, which permit shall be subject to revocation by the Board of Health at any time for any of the causes herein specified.

Said permit shall not be transferred by the person to whom it is issued without the consent and approval in writing of the Board of Health, and any transfer or attempted transfer thereof, or any change in the name of such institution, or change in the management or managers of such institution, or the location of such institution without the approval of the Board of Health in writing, shall render such permit absolutely void and cause the immediate forfeiture of such permit and of all rights thereunder to establish, maintain, operate or conduct any such institution within the limits of the City of St. Louis.

Every person who secures a permit from the Board of Health to establish, maintain, operate or conduct any institution described in this ordinance shall immediately notify the Health Commissioner of any change in the medical staff, resident physician or surgeon, superintendent, midwives or matron, attached to or connected with such institution.

Sec. 5. Any and all hospitals, sanitariums, lying-in establishments, lock hospitals, homes, retreats or other places, or like or similar institutions, intended for the boarding, lodging, nursing or care of the sick, or such other persons as are suffering from or afflicted with bodily or mental infirmities or ailments of any kind whatsoever, or pregnant women, within the limits of the City of St. Louis, shall keep a physician, licensed to practice medicine and surgery in the State of Missouri and who is actively engaged in the practice of medicine and surgery, resident therein.

Sec. 6. Any person who shall establish, maintain or conduct any hospital, sanitarium, lying-in establishment, lock hospital, retreat, home or place, or like or similar institution intended for the boarding, lodging, nursing or care of the sick or such persons as are suffering from or afflicted with bodily or mental infirmities or ailments of any kind whatsoever, or pregnant women or an insti-

tution for the care of orphans, vagrant or destitute children, a foundling home, or a dispensary, in the City of St. Louis after the passage and approval of this ordinance without first having obtained a permit from the Board of Health so to do; or any person who shall continue to maintain, operate or conduct any such institution or place after the Board of Health shall have revoked the permit so to do previously issued to such person; or any person to whom a permit shall have been issued to establish, maintain, operate or conduct any such institution who shall transfer such permit without first obtaining the approval of the Board of Health in writing therefor; or who shall allow any room in the cellar or basement of such institution to be occupied by a greater number of persons than will afford less than four hundred cubic feet of air to each adult and two hundred cubic feet of air to each child under twelve years of age occupying such room; or who shall permit any accumulation of dirt, filth or garbage in or about the buildings or premises of such institution; or who shall permit any person to practice medicine, surgery or midwifery in such institution who is not authorized by the laws of the State of Missouri so to practice; or who shall establish, maintain, operate or conduct any institution named in this ordinance under any other name or at any other place than as stated in the application for a permit to establish, maintain for a permit to establish, maintain, operate or conduct such institution, without the consent and approval of the Board of Health in writing therefor; or who shall fail to immediately notify the Health Commissioner of any change in the medical staff, resident physician, superintendent, matron or midwives of any such institution; or who shall establish, maintain, operate or conduct a hospital, sanitarium, lying-in establishment, lock hospital, home, retreat or other place or like or simliar institutions intended for the boarding, lodging, nursing or care of the sick or such persons as are suffering from or afflicted with bodily or mental infirmities or ailments of any kind whatsoever, or pregnant women, within the limits of the City of St. Louis, and shall fail to keep a physician, licensed to practice medicine and surgery in the State of Missouri, and who is actually engaged in the practice of medicine and surgery, resident therein shall be deemed guilty of a violation of this ordinance.

Sec. 7. Any person who shall violate any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined in a sum not less than fifty dollars nor more than five hundred dollars.

Sec. 8. The Board of Health is hereby authorized to make from time to time such rules and regulations in respect to the management and conduct of any institution described in this ordinance, and for the care and treatment if the patients or inmates thereof, as said board may deem wise.

Sec. 9. For any violation of any the provisions of this ordinance or for any violation of the laws of the State of Missouri or the ordinances of the City of St. Louis, or for any violation of any of the rules and regulations which may be prescribed from time to time by the Board of Health for the conduct or management of any of the institutions herein named, the Board of Health shall have the right to revoke any permit theretofore granted by it, provided said board shall issue a notice to the person named in such permit, advising him of the time and place of the board's action thereon and the grounds therefor. Said notice shall be served at least ten days prior to the hearing thereo, either by delivering a copy thereof to the person therein named or by leaving a copy of such notice at the institution named in the permit which the board intends to investigate.

Sec. 10. Every person who is maintaining, operating or conducting a hospital, sanitarium, lying-in establishment, lock hospital, home, retreat, or other place, or like or similar institution, intended for the boarding, lodging, nursing or care of the sick or such persons as are suffering from or afflicted with bodily or mental infirmities or ailments of any kind whatsoever, or pregnant women, or an institution for the care of orphans, vagabond or destitute children, a foundling home or a dispensary in the City of St. Louis shall, within sixty days after the passage and approval of this ordinance, secure a permit from the Board of Health, in accordance with the provisions of this ordinance, to maintain, operate and conduct such institution or place.

Laboratories of Reed & Carnrick.—The profession will be interested to learn that Dr. W. von Riedl of the University of Berlin, former assistant in the laboratories of Professor Koch and Virchow and late first assistant to the department of medicine in the University of Heidelberg, has been appointed pathological chemist and chief of the pathological and bacteriological laboratories of Reed & Carnrick. He brings to them the latest thought and researches of the German laboratories and the most advanced methods will be given to the examination of urine, sputum, excreta, blood and tissue. The appointment adds strength to an already strong institution.

THE SPIRIT OF THE MEDICAL PRESS.

WHAT SOME OF THE MEDICAL EDITORS ARE SAYING.

Castration to Prevent Criminal Assault.—In spite of the legal measures and the many lynchings, the number of criminal assaults on women throughout the United States has been gradually on the increase, and in the past year almost twice as many such horrible assaults have occurred as during the previous year. Dr. Ewell, of Rickerville, Virginia, in the January issue of the Virginia Medical Journal, in his article referable to this question, argues that the measures aimed against these criminals have both failed to deter them, because few of the would-be criminals ever hear of them. These crimes are committed mostly by the vagrant class of the black race. The doctor suggests that criminals of this kind be castrated, their ears cut off close to the head, and then turned loose, so every one may recognize them at first sight. This, he thinks, would do more to prevent such horrible acts than capital punishment. While we do not believe in disfiguring a man by cutting off his ears, we do believe that if the legislatures in a few States would pass a castration law for the punishment of these criminals, the number of such crimes would be reduced more than 95 per cent. Such a law should be national, and each State have an appointed board of commissioners, who should license the surgeon to perform the operation, thus protecting the surgeon, who may afterwards be sought by the criminal for revenge. The editor knows of a surgeon whose life was in danger for a long time because he removed the diseased testicles in one of his patients, whose mind after the operation became partially unbalanced, probable due to the absence of the testicles, and who conceived the idea that the surgeon removed the organs unnecessarily. When a man is considered insane and dangerous to the public, he is taken into custody and deprived of his liberty. Most of these criminals in question are bordering on sexual insanity, and, as a rule, are degenerates. Would it not be far better, eventually, if all criminals, who, as a rule, are degenerates, be prohibited from producing offspring? Who, with a sound mind, would not regret his existence were he born of criminal parentage? The present punishment for criminal assault on women is not half drastic enough, and there is no punishment more severe, and less dangerous to the life and limb of such criminals, than castration.—Med. Bulletin, March, 1907.

Tearing Aside the Veil.—A suit in equity has been brought in the superior court at Concord, N.H., for the purpose of securing an accounting of the receipts and expenditures of the fortune of Mrs. Mary Baker G. Eddy, pastor emeritus of the Christian Science Church and author of all the works on christian science which amount to anything in a financial sense. The appointment of a receiver is also asked. The plaintiffs are Mrs. Eddy's only son, George W. Glover, his daughter, Mary Baker Glover, and Mrs. Eddy's nephew, George W. Baker. The real petitioner is Mrs. Eddy herself. The New York World which brought to public attention a fact suspected by many outsiders and generally known within the inner circles of the church, that Mrs. Eddy was mentally and physically incapacitated and was being kept in seclusion while a living dummy was sent out in her stead on the daily drives, published on March 2 the facts connected with the bringing of the suit. It is interesting reading and in view of the fact that the defendants are the members of the Eddy household at Pleasant View, it is quite likely that revelations of a more or less intimate character will be forthcoming. The papers tell a most pathetic story of the inability of the son to reach his mother without interference from the servants of the house. His letters were read by others and answered by them; and when he finally did gain access to the presence of his mother, a feeble and tottering old woman greeted him and his daughter, an old woman rapidly approaching her grave, who babbled of a "stolen will," and a plot to kill her; whose mind wavered and flickered between the events of today and the happenings of tomorrow, and to whose memory, age-crumbled and fleeting, the things of a week ago were lost in the musty ages of a past long, long forgotten. This suit is not an attack on the Christian Science Church or any of its beliefs; they do not enter into the case at all; the action is for the protection of an old woman who is under the influence of people surrounding her who are not laboring in her interests. Vast sums of money are involved and the revelations which are to come when the trial is reached will be amazing in their ramifications and world-wide extent. That there is nothing in the nature of a circus display or tom-tom hurrah about the action, is shown by the fact that the senior counsel for the plaintiffs is ex-senator William E. Chandler, of New Hampshire. It is more than likely that there will be considerable science of a certain financial character disclosed in the trial; but just how much christianity will be shown remains to be seen.—Buffalo Med. Jour.

THE MEDICAL FORTNIGHTLY

A Cosmopolitan Biweekly for the General Practitioner

The Medical Fortnightly is devoted to the progress of the Practice and Science of Medicine and Surgery. Its aim is to present topics of interest and importance to physicians, and to this end, in addition to a well-selected corps of Department Editors, it has secured correspondents in the leading medical centers of Europe and America. Contributions of a scientific nature, and original in character, solicited. News of Societies, and of interesting medical topics, cordially invited.

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Contributions and books for review should be addressed to the Managing Editor, 319 and 320 Century Building, St. Louis, Mo.

MEDICAL MISCELLANY

THE DENATURED ALCOHOL can be made by a small distillery not costing more than $200.00. This is good news for the farmer, but that free and easy as well as independent member of the community will be harassed with many government regulations and much red tape when he comes to distill alcohol and denature it. The regulations in this country are about the same as those in force in Germany.

CONTAGIOUS DISEASES IN PHILADELHHIA HOSPITALS.—The hospital of the University of Pensylvania has recently had several cases of diphtheria develop within its wards. Another large Philadelphia hospital has also been quaratined by the board of health on account of the occurrence of diphtheria. About a week ago the boards of managers of the Pennsylvania Hospital, the Presbyterian Hospital, and the Jefferson Medical College Hospital decided to refuse admittance to visitors to the patients for a time, as a precautonary measure against the development of contagious diseases within their walls. For a year or two the German Hospital has excluded children from visiting patients in the ward as a prophylactic measure against the development of contagious disease.

HOSPITAL FOR GASTRIC DISEASE.—The American Hospital for Diseases of the Stomach, 1809 Wallace street, Philadelphia, was formally opened January 3d. The hospital has been established for the treatment of patients suffering from gastrointestinal ailments, and also for the scientific study of such diseases. The hospital at present has 30 ward beds and a number of private rooms. A free dispensary, open every day, is operated in connection with the hospital.

RELATIVE NUMBER OF THE SEXES.—As regards the relative number of the sexes born, the average for Europe gives 106 boys for every 100 girls. Further, according to researches made both in England and also in Germany, on the influence of the age of parents on male and female births, it is found that in general where the mother is older than the father, fewer boys than girls are born; the same is the case where the parents are of equal age, but the more the father's age exceeds that of the mother's is the ratio of boys greater.

HOSPITAL TIPPING SYSTEM.—The Kings County (N. Y). grand jury for February has adopted resolutions calling on the March jury to investigate conditions in the Brooklyn Hospital, where it is alleged that there is an elaborate system of tipping among the orderlies which causes great suffering to patients uanble to pay. Dr. Hanneman, the superintendent of the hospital, said that is the custom in nearly every hospital for patients to give fees to the orderlies, but denied that there was any organized system of graft or that any patient had suffered from neglect.

THE governors of the New York Skin and Cancer Hospital, Second avenue, corner 19th street, announce that Dr. L. Duncan Bulkley will close his clinical course with four special lectures: March 27. Practical Points in the Diagnosis and Treatment of Diseases of the Skin. April 3d. Errors in Diagnosis and Treatment; Dont's in Dermatology. April 10th. Danger Signals from the Skin. April 17th. The Significance and Treatment of Itching. And also announce a lecture by Dr. William Seaman Bainbridge: April 2. Some Phases of the Cancer Problem. Illustrated by a series of cases in the Out-Patient Hall of the hospital at 4:15 o'clock. The lectures will be free to the medical profession.

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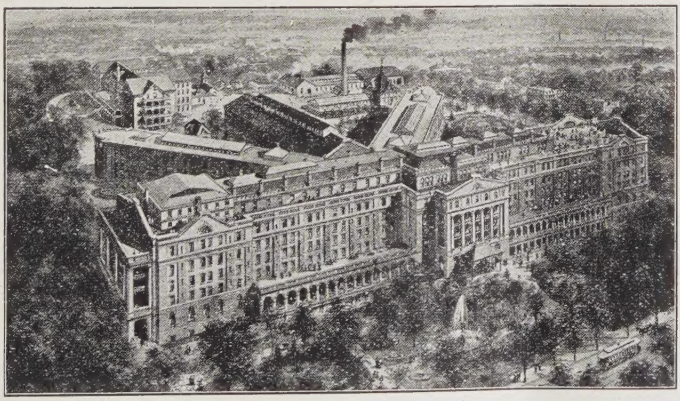

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MEDICAL MEMORANDA.

I recommend resinol soap for general family use. I find it very good for the care of the face and the preservation of the hair.—F. A. Wenger, M. D., St Paul, Minn.

Carabana has a tonic effect, stimulating the entire system, improving the appetite, removing the fetor of the breath, sallowness of the complexion, headache and vertigo (Demarquay.) In intestinal indigestion with deficiency of bile, and in typhoid fever it acts as an antiseptic, destroying the bacteria and preventing auto-infection (See and Bouchardat.)

An Efficient Means of Relieving Pain.—The pain which accompanies the intestinal diseases resulting from grippe colds is often severe and requires the use of an effective anodyne. Papine is particularly adapted to such needs as it represents all of the pain relieving properties of opium without its narcotic and nauseating effects. It is apparent that such a remedy has a wide range of usefulness, and that papine is well appreciated by the medical profession is shown by the place it has occupied in the medical armamentarium for so many years.—The International Journal of Surgery.

Pertinent Thoughts.—The epidemics of la grippe which have made their annual onslaughts for some years, have taught us that this disease, once considered of no serious consequence, is so dangerous and difficult to treat, that any suggestion regarding medication is always gratefully received. With each succeeding visitation of this trouble, we have found it more and more necessary to watch out for the disease in disguise, and to treat these abnormal manifestations ; consequently we have relied upon mild nerve sedatives, anodynes and heart sustainers, rather than upon any specific line of treatment. Most cases will improve by being made to rest in bed and encouraging action of skin and kidneys, with possibly minute doses of blue pill or calomel. We have found much benefit from the use of antikamnia and codeine tablets in the stage of pyrexia and muscular painfulness. This tablet, containing 4¾ grains antikamnia, and ¼ grain sulphate of codeine, is a sedative to the respiratory centers. In the treatment of la grippe and its sequelae, its value is highly esteemed. In diseases of the respiratory organs following an attack of la grippe, pain and cough are the symptoms which especially call for something to relieve. This combination meets these symptoms, and in addition, controls the violent movements accompanying the cough. To administer these tablets in the above conditions, place one tablet in the mouth, allowing it to dissolve slowly, swallowing the saliva. Exhibited in the grinding pains which precede and follow labor ; in the uterine contractions which often lead to abortion ; in the various neuralgias, and in all neuroses due to irregularities of menstruation, this combination affords immediate relief. In these last conditions, always instruct the tablets to be crushed before taking.

Neurasthenia.—Today it is generally recognized that neurasthenia is a real morbid condition. It is not the result of modern civilization, as many writers would have us believe, but an actual disease that has probably existed as long as society. The name is not a generic term and when so used implies ignorance of the real condition it describes. Instead, it represents a specific malady with a definite etiology, pathology and symptomatology. There can be no question but that the trend of modern life, particularly under certain conditions, tends to aggravate and multiply cases of this disease. Overwork is unquestionably one of the principal causes, coupled with anxiety, worry and persistent excitement. It is a fact that the nervous system or the mental economy of any person can stand only about so much. When overtaxed the results are bound to be disastrous, just as a muscle will suffer from excessive work. Add to overwork, individual habits, including excesses of all characters, and neuropathic tendencies which are all too often the result of hereditary influences, and it can be readily seen that nerve tire is of prime importance in the development of neurasthenia. Within later years certain toxic states such as syphilis, rheumatism, malaria or the auto-intoxication of chronic constipation, have been recognized as important factors in the etiology of the disease. At any rate close study points to this important fact, that not one, but several causes united to produce the group of symptoms ascribed to neurasthenia. The prime object in treating this distressing condition is to restore nerve balance. Change of scene, regulation of the diet and correction of habits and faulty hygienic conditions are desirable features. But something more is always needed, and without the administration of some efficient tonic the neurasthenic will make little or no substantial improvement. The principal desideratum is to choose a tonic that goes further than mere temporary stimulation, one that will assuredly impart vigor to the nervous system, and at the same time assist each weakened organ in the re-establishment of its functions. Such a tonic is Gray's glycerine tonic compound. Clinical experience has proven the therapeutic value of this well known product and under its administration the various conditions incident to neurasthenia are corrected and overcome The nerve balance is restored, the digestive organs take up their work, normal elimination is promoted, and the various symptoms characteristic of nerve exhaustion are dissipated without the slightest evidence of undue stimulation. Gray's glycerine tonic compound moreover has this very important advantage, it not only aids worn out, tired cells and organs to do their work, but it does more—it helps them to help themselves. The results obtained, therefore, are permanent, not transitory.